

# **WEST YORKSHIRE LOCAL TRANSPORT PLAN 2001 - 2006**

## **APPENDICES**

Contained in this file are supporting documents to the main Local Transport Plan. The documents either provide greater details than given in the main document or provide specific information requested by the Department of the Environment, Transport and the Regions.

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In addition, as separate documents, the following are also provided:

- Airport Access Strategy
- 'Annex E' Submissions for each of the Major Schemes (including individual Appraisal Summary Tables)

## **CONSULTATION AND PARTICIPATION REPORT**

### **1. BACKGROUND**

The West Yorkshire Local Transport Plan partners have individually undertaken much public consultation on their separate transport strategies and associated 'Package' programmes, which have been under development since the early 1990s. This consultation included specially convened public meetings, the distribution of publicity leaflets including questionnaires and presentations to groups and organisations.

When, in 1996, the five West Yorkshire districts and Metro agreed formally to publish a joint 'Package' bid for 1997/98, renewed effort was put into consultation. This was mainly by repetition of the tried formats of earlier years.

There was a feeling amongst the partners that the methods of consultation employed might not be reaching all sectors of the community or enough people to be truly representative. Neither was it felt to allow for genuine public participation or involvement in the development of strategies, policies and priorities.

The introduction of the Local Transport Plan regime for the bid year 1999/2000, together with encouragement given in the Government's LTP guidance in this respect, gave the opportunity for a comprehensive review of consultation and participation strategy.

### **2. PURPOSE OF CONSULTATION**

The consultation and participation strategy has been designed to perform several functions; namely to provide information, to undertake consultation and to achieve participation. The programme covers both the broad principles of the transport strategy and the priorities for its delivery and, in varying levels of detail, the scheme content of the implementation programmes. These principles have been applied to the preparation of the provisional Plan, through the development of the full Plan for submission in July 2000, and will continue through the life of the five-year Plan.

The various objectives can be summarised as follows:

- to impart information about the LTP to as wide an audience as possible. This is essentially a one-way process in which information is disseminated from the authority to the public (This is an important complement to consultation, in that people cannot be expected to respond meaningfully to consultation without first being in possession of the relevant facts);
- to obtain views on the development of the various aspects of the strategy and the relative priority/emphasis given to each;
- to obtain views on the style and coverage of the submission;
- to enable the public to have a direct influence on the preparation of the Plan;
- to foster an understanding between different user groups of each others' transport needs;
- to generate a sense of ownership of the Plan.

### **3. METHODS USED**

A number of different methods were employed, each having a slightly different aim, but complementing one another to produce a balanced, comprehensive programme of

consultation and participation. The methods used and a detailed description of the methodology are set out below.

### **3.1 Brochure and Questionnaire**

A professionally produced colour brochure, presenting a summary of the key points of the LTP strategy and programmes, was widely distributed. It included a questionnaire on a prepaid postal form. (A copy is attached as Appendix 1)

#### **Aims**

- To inform the widest possible audience about the LTP and to obtain opinions from a large number of people.

In the past, similar brochures have achieved only a limited response due partly to the passive methods used for distribution. This time, in addition to the passive methods, the brochure was given out to targeted transport user groups in order to ensure that no group was inadvertently ignored.

#### **Methodology**

A full colour brochure, approximately A2 folded to A5 size, was produced. It summarised the content of the provisional LTP, including the vision and challenge, the four key elements of the transport strategy, a brief description of key scheme proposals and a breakdown of proposed expenditure by type of scheme/transport user beneficiary. Also included was a questionnaire on attitudes to a variety of aspects of transport for return by a freepost address.

16,000 brochures were printed initially. They were distributed through a number of outlets designed to reach a wide and varied audience. Brochures were left in Council buildings such as libraries, housing offices and other offices where the public have access and were invited to pick up the brochures. They were also left in health centres/surgeries and handed out at bus and rail stations. Copies were sent to schools and, to reach people who were more likely to be car borne, they were left in sports centres and handed out at selected supermarkets in each district.

In each district, apart from Calderdale, brochures were sent to the major businesses and employers. In Calderdale, an established network of business consultees was used to distribute 180 slightly amended questionnaires. In addition to this brochures were sent out to specific interest organisations who had requested them. Care was taken to keep this approach to a minimum to avoid skewing the results towards one area of interest. In the event this was not a problem as the numbers were relatively small compared to the overall number of replies received.

A further 12,000 brochures were printed and distributed extensively at supermarkets in the Leeds area and sent out to small businesses in Leeds District.

#### **Results**

A total of 2006 completed questionnaires were received, which represents a rate of nearly 7.4% of the 28,000 total brochures distributed. From past experience, this represents a successful outcome to the consultation. In fact the response to the first batch of 16,000 brochures was even better, approaching 10%. A further 81 replies were received from the Calderdale business consultation, a 45% response rate.

A summary of the responses is given in Section 4 and in Appendices 2 and 3.

### **3.2 Internet Website**

This is an increasingly popular medium allowing an almost limitless amount of data to be made available, and which can be updated on a regular basis.

#### **Aims**

- To provide as much of the developing Local Transport Plan and supporting information in electronic format as possible for the benefit of those who have access to a computer.

#### **Methodology**

A website address ([www.westyorkshire-ltp.co.uk](http://www.westyorkshire-ltp.co.uk)) has been set up on which has been placed the text of the provisional Local Transport Plan with links to other useful sites. The site has been updated as development of the full Plan has progressed. Also posted on the site is the brochure and questionnaire, which can be completed and returned on-line.

#### **Results**

75 questionnaires were returned by this method. The data has been incorporated into the analysis of the postal returns reported in Section 4.

### **3.3 Seminars**

A programme of seminars was held for invited specific interest and community groups and business representatives on a countywide basis. The interest and community group seminars were also advertised for the general public.

#### **Aims**

- To ensure that the views of specific transport user representative groups were obtained;
- to ensure that representatives from different sectors of industry, business and commerce had an input into the LTP, both as users and providers;
- to give the opportunity for direct, two way contact between the public and officers preparing the LTP.

#### **Methodology**

A number of seminars have been held as follows:

##### 17 April 1999 Interest and Community Group Seminar

The seminar was held in Leeds Town Hall on a Saturday morning and comprised an invited group of both district and county-based representatives of interest, community and transport user groups. It was also open to the general public. The meeting discussed the policy and strategy issues to be covered in the provisional LTP.

##### 15 June 1999 Business Seminar

The half-day seminar was held at an hotel in Leeds and comprised an invited group of representatives of the main businesses and business organisations district and countywide. The meeting discussed transport issues that were of particular relevance to businesses.

##### 23 October 1999 Interest and Community Group Seminar

This seminar was organised on a similar format to the 17 April seminar. The same

groups and organisations were invited, plus any other groups subsequently identified, to discuss the provisional LTP as it was submitted with a view to steering the development of the full plan.

#### 15 April 2000 Interest and Community Group Seminar

This was a further meeting of interest and community groups to discuss an early draft of the full LTP.

#### **Results**

Attendance at the Interest and Community Group Seminars was approximately 60 to 70 delegates on each occasion.

Notes of each meeting were written up and contained strong themes which were common to the various workshop groups that comprised the meetings. A summary of the main issues raised at the seminars is included in Section 4.

### **3.4 Public Meetings**

A number of special public meetings were held, or presentations made at interest group meetings.

#### **Aims**

- To publicise the LTP strategy and enable participation at a more local level and to consolidate the views of the seminar group representatives.

#### **Methodology**

A variety of meetings were held in each district, either called specially or by way of a presentation made to already scheduled meetings

#### January / February 2000 Chambers of Commerce

Presentations were made to meetings of the Chambers of Commerce in each district except Bradford. Members were asked to return their comments, preferably on the consultation brochure questionnaires.

#### Other Meetings

Bradford	Addingham, Oxenhope and Silsden Parish Councils 45 Neighbourhood Forums
Calderdale	The Standing Conference of Women's Organisations The Rights of Way Sub Committee The Environmental Forum – Transport Focus Group
Kirklees	Holme Valley Parish Council Kirklees Cycling Public Meeting
Leeds	Leeds Cycling Consultation Meeting Leeds North and Roundhay Community Forum Morley Community Partnership South Gipton Community Forum Chapel Allerton Project

	Leeds Civic Trust
	Barclays Home Finance Lunchtime Employees Meeting
	Seminar for Leeds Councillors
	Pedestrians Association
Wakefield	Transport and Health Seminar
	Community Assembly Conference
Metro	District based Passenger Consultative Committees (several presentations in each district)

## **Results**

All the meetings of established groups were well attended by regular group members. The Neighbourhood Forums held in Bradford were specifically aimed to attract the residents in each locality and attendance varied, apparently influenced by what other issues of local interest were on the agenda. It is estimated that, in total, over one thousand people will have attended the meetings.

### **3.5 Market Research - Focus Groups**

Specialist market research consultants were employed to conduct focus group sessions with selected groups of transport users. The selection ensured that representative samples of the population according to agreed criteria were involved.

#### **Aims**

To draw out issues that are of concern to people in order to guide and inform the design of a wide ranging questionnaire for use in the resident's survey.

#### **Methodology**

Thirteen focus groups were held with different sectors of the population across different areas as follows:

1. Rural dwellers (2 groups)
2. Urban dwellers (2 groups)
3. Car users (2 groups)
4. Non car users (2 groups)
5. Young people aged 16 to 18
6. Elderly aged 70+
7. Social class DE
8. Business owners/managers
9. Disabled People

The groups were held in Bradford, Halifax, Huddersfield, Wakefield and Leeds. The composition and location of the groups were carefully selected to obtain views, as far as possible, from a representative cross section of the community with different interests, experiences and priorities concerning transport.

The partners and Consultants, MVA, developed a topic guide for the focus groups and

MVA's social research staff moderated and recorded each session for subsequent analysis. Those analyses were used to guide and inform the design of the questionnaire for the main survey, as well as for inclusion in the Market Research report.

## **Results**

The output from the Focus Groups was fed directly into the design of the residents survey questionnaire.

### **3.6 Market Research - Residents Survey**

Following the focus groups, a survey was conducted of over 1,500 residents chosen to reflect the population profile of each district.

#### **Aims**

- To provide quantitative data to allow priorities to be set for expenditure on different categories of work in the LTP;
- to obtain a view from a representative sample of the population on issues identified by the focus groups;
- to enable a comparison to be made between respondents to the wider Council survey and the representative sample survey.

#### **Methodology**

The sample of the residents survey was constructed using the census and Postal Address File (PAF). Fifteen enumeration districts (EDs) were selected at random in each of the five districts (75 EDs in total). These were matched to the PAF to obtain a list of addresses from which the sample of residents could be drawn.

Quotas were set to reflect the profile of the population of each district based on the most recent data available in each authority. Age and gender quotas were based on ONS 1998 mid year estimates for the resident population. Employment status was generally based on Labour Force Survey Local area data. Car ownership for all districts was based on the regional percentages for Yorkshire and the Humberside from 'Regional Trends 1998'. The data obtained was adjusted for under or over achievement of the desired quotas.

The questionnaire was designed to cover:

- travel patterns and choices;
- perceptions of transport issues;
- opinion of transport strategies and measures;
- importance of consultation;
- demographic information.

#### **Results**

The fieldwork was carried out between 13 December 1999 and 10 February 2000. A total of 1598 interviews were completed throughout the area and the findings are summarised in Section 4.

### **3.7 Market Research - Minority Ethnic Groups**

Complementary to the main research, focus groups were held with specific sub-groups in the Asian community, followed by in depth interviews with Asian women from low response sub-groups.

#### **Aims**

- To reach groups of people whom it was felt would be under-represented when using conventional survey techniques.

#### **Methodology**

It was recognised that there were certain sectors of ethnic communities who would not be reached by the methodology described above. Specialist consultants Istikhara Research Ltd. carried out a separate but parallel exercise to redress this balance.

Three focus groups were held comprising the following categories:

- Pakistani women who relied on others to drive them around (14 participants);
- Asian male car drivers (9 participants);
- young Asian males and females who use public transport (8 participants).

In-depth interviews were held with women whom it was felt would be unwilling to attend focus groups. These were:

- 5 interviews with Pataan women;
- 5 interviews with Bengali women;
- 5 interviews with Gujerati women.

The fieldwork was carried out during January and February 2000.



## 4. SUMMARY OF MAIN CONCLUSIONS

### 4.1 *Brochure and Internet Website Questionnaire*

An analysis of 2081 completed questionnaires has been carried out. The results are set out in tabular and histogram form in Appendix 2 to this report. The main findings from the analysis are set out below.

#### Question 2 Transport Issues, perceived level of problem

Respondents were asked to rank transport issues from 'no problem' to being a 'severe problem'. The six issues with the highest proportion rating them as a 'problem' or a 'severe problem' were:

1. traffic congestion in the "rush hour" (84%);
2. congestion/parking around schools (77%);
3. road casualties and traffic danger (72%);
4. air and noise pollution (72%);
5. excessive traffic speeds (67%);
6. quality of bus services (67%).

#### Question 3 Priorities for addressing transport issues

People were asked to rank a range of eleven transport objectives, giving their top five priorities. Those receiving the highest rankings are listed below, starting with the highest:

1. enable people to get to work, shops and social life (82%);
2. transport infrastructure should be well maintained (72%);
3. alternative modes should be improved to give a wider choice (70%);
4. reduce pollution to improve air quality and health (57%);
5. people should travel safely and without fear (55%);
6. problems encountered by disabled and elderly should be addressed (52%).

#### Question 4 Acceptability of measures

People were asked to rank a range of ten alternatives for deterring people from using cars for some journeys between acceptable and unacceptable.

Three measures were felt by a majority of respondents to be acceptable or fairly acceptable, namely:

- transfer of road space to bus (73%);
- transfer of road space to pedestrians (72%);
- transfer of road space to cycles (63%).

The other seven measures all received a relatively high percentage of "unacceptable" or "fairly unacceptable" responses, the most unacceptable being:

- increase fuel duty above inflation (72%);
- charge for using motorways (70%);

- charge employees to park at their workplace (65%);
- charge for parking at retail parks (58%).

The following measures were also rated as 'unacceptable' or 'fairly unacceptable' by a smaller majority of respondents:

- cut commuter parking spaces (58%);
- increase commuter parking charge (58%);
- charge cars to enter towns and cities (57%).

It is, perhaps, not surprising that measures that may penalise the private motorist are unpopular. Given the level of support for reducing the level of traffic in some places, it might be argued that people support the ends but not the means by which they may be achievable. Nevertheless, there is some support for these measures with, for example, as many as 40% of respondents finding charges to enter town and city centres to be acceptable or fairly acceptable and 39% thinking likewise about charging for parking at retail parks.

#### Question 5 Targets

They were also asked whether it was appropriate to set specific targets for a range of issues. The four receiving the most support, in order of popularity, were:

1. reverse the decline in the use of buses (92%);
2. further reduce fatal and serious casualties and halt the increase in slight casualties (89%);
3. get people walking instead of driving for short journeys (86%);
4. reduce the existing levels of traffic in certain places or at certain times (81%).

There was also clear support for the other suggested issues for targets:

- reduce the amount by which traffic is growing each year (75%);
- reduce the number of cars that carry only the driver (63%);
- reduce average vehicle speeds (62%);
- adopt the government's cycling target (double cycle journeys by 2002 and again by 2012) (62%).

#### Other Comments

In addition to the multiple choice questions, respondents were given the opportunity to make further comments. Subjects covered were many and varied but it has been possible to group them together into subjects with common themes. Some of the most repeated comments are set out in Appendix 3.

Generally, only where there were four or more comments on an issue has it been reported. However, where very few comments were received on a strategy subject, this has been relaxed to ensure that minority views do not go unreported, for example only one comment was received about horses.

There were many instances of opposing views being given, for example in the category of Roads, '*Road building and improvements will exacerbate problems of traffic growth*' (1) contradicts '*More money should be spent on increasing road capacity*' (2) and

*'East Leeds Link should be scrapped'* (1) contradicts *'Build East Leeds Link Road'* (1). Similar instances can be found in all categories.

## **4.2 Seminars**

COMMENTS FROM INTEREST AND COMMUNITY GROUP SEMINAR 17 APRIL 1999

### Policy issues

- Public transport was seen as essential to sustainability.
- Reliability of services and the information about them is paramount.
- A single ticket for through journeys and close location of bus, rail and tram stations with interchange between modes was seen as the ideal to aim for.
- Rail overcrowding is a big disincentive to potential users.
- The standard of rail stations and facilities, other than in the main centres, could be better.
- Trains and buses need to have the same level of convenience and comfort as a private car in order to compete, and the perceived costs must be less.
- Conversely, cars should be made less convenient and slower through traffic restraint.
- Security issues affect the lifestyle of many people, particularly the elderly, young and women travelling alone. Improvements to make a more attractive and safer environment would benefit all travellers, not only those mentioned.
- Pedestrians and cyclists should be treated as real transport modes and given appropriate priority in scheme design.
- Well designed schemes for disabled and sight-impaired pedestrians would attract and encourage more people to walk.
- Road pricing was seen as an opportunity to raise funds for public transport schemes.
- Workplace parking charges should be passed directly to the driver to be effective as a deterrent.
- Planning policy and transport policy should be mutually complementary. Both have a key role in aiding economic development.
- Location of businesses near public transport to reduce need for car ownership and road freight (railways not motorways).
- Maximum parking provision in planning permissions was advocated.
- Parking availability, not price, was thought to be the greater deterrent.
- There was a general feeling against out of town shopping centres and a need to redress the balance towards town centres.
- Pedestrianisation with good PT access was supported.
- Lack of enforcement of traffic orders was referred to as being detrimental to the potential benefits of a good traffic management/bus priority scheme.

### Consultation process

- Consultation was welcomed. All were keen to be involved further at a more detailed level and at a more local level.

- Comments of the Integrated Transport Forum on the report of the conference should be sent to all delegates.
- There was a desire expressed by voluntary groups to be involved in the I T Forum in order that they could meet with public transport operators.

#### COMMENTS FROM BUSINESS CONFERENCE 15 JUNE 1999

- The choice of appropriate locations for development is a major factor in determining future travel patterns.
- In order to attract passengers to public transport, we should concentrate on those who do not use it at present, find out why and take the necessary action to convert them.
- No one mode of transport will suit all purposes and the aim should not be for a complete shift from car use.
- Many tools were identified for employers to encourage a reduction in car commuting and there was a definite willingness for delegates to work together on some issues. Suggestions included car sharing, pool cars, flexible working hours, job swapping and home working. A county wide forum to address Green Travel Plans was mooted.
- It was recognised that Package measures in recent years have achieved positive progress. Areas of concern were the lack of capacity on rail for both passenger and freight demand and publicity and information about bus services.
- The promotion of public transport should be on a more business like basis. The poor image, whether deserved or not, needs changing and education in the wider aspects of transport, including health and safety, should be pursued.
- There is sometimes conflict between providing for economic growth and sustainable transport but with coordination between departments and organisations it was felt that those conflicts could be met.
- The many, often conflicting, demands on transport system providers were noted: town, city, rural needs; business, customers, leisure, commuting; and it was noted that there are never enough funds available to satisfy all demands. The challenge for the Local Transport Plan is to achieve the right balance and apply measures appropriate to each circumstance.
- The revenue costs of transport plan schemes were recognised and new income streams need to be identified. The idea of using income from town centre parking schemes, park and ride, etc. for solutions to transport problems was discussed and thought to be sensible way forward.

#### INTEREST AND COMMUNITY GROUP SEMINAR 23 OCTOBER 1999

##### Objectives

- There should be an objective relating to quality of life and social inclusion
- The environment should be given more prominence
- The objective relating to traffic growth should aim to reduce traffic, not the rate of growth. It was agreed that an absolute reduction in traffic could be an ultimate objective of the long-term plan, after stabilisation in the short term.

##### Priorities of Key Issues

- Improvements to public transport were seen as vital to the success of the Plan,

particularly interchange between bus and rail, through ticketing, smart card ticketing, timetabling and information.

- The priority attached to walking should be raised. A stronger emphasis is needed on development planning, junction design, maintenance, obstructions and the siting of street furniture.
- Land Use Planning should support transport objectives
- Speed reduction was seen as important along with more effective enforcement of speed limits, bus and cycle lanes, parking restrictions, etc. to ensure better traffic management.
- Demand management by way of parking provision and charging, travel plans, road user charging was an important topic, although there was not universal agreement on all issues.

#### INTEREST AND COMMUNITY GROUPS SEMINAR 15 APRIL 2000

An early draft of the LTP text was sent to delegates to stimulate discussion. The main comments arising from the meeting were:

- There was continued concern about the target for traffic reduction relating to the rate of growth rather than an absolute reduction in traffic numbers
- More priority should be given to enforcement
- There was a lot of discussion about major schemes and concern that there was very little public transport content in the proposals
- A West Yorkshire strategic cycling network should be brought forward in the LTP as a major scheme
- Greater priority should be given to measures to encourage walking
- Bus services should be reliable and regular with a half hourly service as a minimum
- Horseriders, including driven horses, should receive more coverage
- 20mph zones outside schools should be standard
- Green travel should be much more focussed with a commitment to achieving real progress
- There needs to be stronger measures for parking charging and reduction

#### **4.3 Public Meetings**

The first aim of the meetings was to address a wider and more localised audience than could be accommodated in the seminars held in Leeds Town Hall. This was achieved by each district meeting with different interest groups, thereby covering a wide range of interests including environmental and women's issues, rights of way, cycling, health, Parish Councils and community groups.

The second aim was to gather views from these local groups, largely for comparison with, and confirmation of, the views of the seminar groups. It was found generally that the same issues and concerns were raised at many of the meetings, albeit sometimes more vociferously by the single interest groups when not tempered by other interests. Participants were encouraged to complete and return the consultation questionnaire.

Issues of a specific local importance were noted, to be addressed by the relevant district when preparing their detailed programme for implementation.

#### **4.4 Market Research – Focus Groups**

No separate results were tabulated for the focus groups, as the purpose was to steer the design of the residents survey questionnaire. However, the consultant's report cross refers comments from the focus groups to the survey results.

Issues raised were:

##### Travel Patterns and Choices

- Car commuters could use another mode but would rather not.
- Reliability of bus and train at peak times
- Peak travel too busy and uncomfortable
- Making connections would increase journey times
- Frequency of early morning and late night buses for workers
- Buses are costly and unsafe for children on journeys to school
- Walking short distances can be quicker if the bus is stuck in traffic
- Safety and pollution deterred many from cycling themselves or allowing their children to cycle to school
- Using a car for shopping trips is much easier than public transport

##### Perception of Transport Problems

- Few people thought transport problems greatly affected the quality of their day to day lives
- Congestion seen as a main problem, particularly journey times to work and to school
- Buses unreliable due mainly to congestion
- Too much freight on the roads, it adds to congestion and is unsafe in small towns, overnight deliveries suggested
- Out of town shopping centres seen as more convenient and easier than parking in town leading to fear that trade would be taken away from towns

##### Transport Strategies and Measures

- Road safety was an important issue.
- Speed humps seen as effective in residential areas.
- Raise awareness of potential blackspots and educate children to cross the road safely.
- Measures to reduce car use by increasing motoring costs was deemed unfair.
- Pensioners and disabled people who could not use public transport would not be able to afford to travel about.
- Local businesses were particularly worried about the effect punitive charges would have on their businesses.

- Many felt that increased car use was detrimental to the environment and would like to use their cars less, but not until public transport improves

#### Consultation and Information

- Local newspapers were thought to be the best way of communicating information
- Many thought public meetings were a waste of time
- Public transport users thought it would be useful to have timetables and route change details on the actual bus services

### **4.5 Market Research – Residents Survey**

#### Priorities for Transport Strategies

Three quarters of the population were either very much or slightly in favour of the overall aim of the strategy, whilst only 8% were very much or slightly against it.

There was broad agreement that improvements to public transport, measures to reduce speed and improve safety and better facilities for disabled people should receive the highest priority in the strategy. Measures to reduce car travel, either by education and publicity or by active discouragement were ranked lowest priority.

Residents were no more in favour of car restraint measures, such as more expensive car parking, petrol tax or road tolls, in the future than they are now. Only a quarter felt that this was important, even in the future, and the majority (56%) considered it unimportant.

Amongst car users there was a strong feeling that people had a right to choose how they travel (96%) and that it is unfair, in a car orientated society, to expect people to use their cars less (74%). However, the same car users agreed that too much traffic is harming the environment (67%) and traffic congestion is getting so bad (64%) that on both counts they would be prepared to walk, cycle or use public transport for some journeys.

#### Priorities for Measures

It has been stated above that improvements to public transport are seen as the most important element of the transport strategy. Within that context residents were asked to rank their top four from a list of specific measures to achieve these improvements. The resulting priority order is as below:

1. Cheaper fares
2. More bus lanes and priority to improve their reliability and speed
3. More low access buses for people with children, elderly and disabled
4. Clearer and more readily available bus information
5. Improved comfort on buses, at shelters and bus stations
6. More buses going to more places
7. Bus conductors
8. Through tickets and more pre-paid tickets
9. Improved personal safety on buses and at bus stations
10. Better driver attitudes
11. Better connections with rail services

It is interesting to note that when asked about the least necessary measures, more buses going to more places came top. This suggests that many people feel that the network is adequate and that improvements should focus on the existing network.

### Consultation

Residents were asked about the best method of involvement and consultation. Local newspapers and leaflets were clearly favoured by over 50%, with around 10% supporting information on buses or on television. Few people wanted surveys, meetings, information on trains or communication via the Internet.

### **4.6 Market Research – Ethnic Minorities**

The numbers of people taking part in the focus groups and the in-depth surveys were small (see below) and therefore it was not appropriate to tabulate or carry out a statistical analysis of the results to any great extent. The results of the focus groups are presented as a series of individual comments or a consensus view of the group.

Focus group attendance:

- Asian male drivers 9
- Asian young people 8
- Pakistani women 14

In-depth interviews:

- Pataan women 5
- Bengali women 5
- Gujerati women 5

The interview questions were structured in the same format as the main market research study and the comments are set out under the same headings.

### Travel Patterns and Choices

Asian male drivers:

- The car was seen as more convenient than other modes of transport and had greater status.
- It gave them flexibility on times of travel and destinations.
- Trains were seen as much faster, efficient and reliable and an option for long distance travel.
- The cost of parking and the inconvenience of driving in the centre of Leeds made the train preferable to the car in that case.
- The cost of using the car if there were several passengers was much cheaper than public transport.

Asian young people:

- Each mode was thought to have advantages in different situations, the speed of trains was particularly highlighted.
- The weather was a big factor in choosing to use public transport. Concern was expressed about untidy appearance at the end of a journey if it is windy and wet.



- For students it was felt that public transport was the only affordable form of transport. Bus stops should be nearer educational establishments for convenience, timekeeping and safety.
- There was also a view that increasing prices would soon make buses in particular non-cost effective.

Pakistani women:

- All the women relied on others, usually family members, to drive them around.
- The women travelled by car, bus or walked. Some occasionally used the train but never bicycle or motorcycle;
- All supermarket shopping trips were made by car, either the family car or taxi;
- The feeling was that a car is a necessity, not a luxury. Improved public transport might encourage some change but the rising cost of public transport meant that the cost of a taxi worked out cheaper for a family.

### Perception of Transport Problems

Asian male drivers:

- The transport systems in European countries such as Germany and France were perceived to be better than in UK. Some thought they were free.
- Public transport in Leeds was perceived to be better than in Bradford, but with no foundation other than the relative economic success of Leeds.
- In West Yorkshire the convenience of the car overrides that of public transport compared to London where buses and public transport was the better option.
- Lack of services off peak created a safety problem at bus stops and interchanges, particularly for women, children and lone travellers.
- Several issues about security were of concern: Bradford Interchange was seen as dangerous and intimidating in the evening, security not adequate to deal with large groups of youths, no apparent way of contacting security staff, cameras on buses thought to be for driver's not passengers' security.
- Timetables should be at every bus stop and in larger print as a high proportion of older people use buses.

Asian young people:

- Transport was seen as just as important as other issues such as health and safety.
- The group felt that traffic congestion will be a future problem and transport related problems will increase.
- Buses were perceived as not being reliable.
- Safety and security at bus stations was highlighted; vandalism, drunks in the evening, etc. made them intimidating places.
- Safety on buses was also an issue, drivers did not always follow up disruptive behaviour and verbal abuse, including racism, was common and particularly intimidating for young women.
- There was a lack of understanding of how bus services work; some thought the driver should take a short cut to get to the destination more quickly.

- There was no commitment to use cycles as they were seen as potentially dangerous due to poor car driver behaviour.
- Taxis were not well liked; young people disliked the “small talk” of the drivers, were afraid of the driver’s bona fide, qualifications and ability, wanted a passenger operated brake so they could get out if they felt threatened, thought there should be more white taxi drivers and would rather ask family or neighbours for a lift than use a taxi.

Pakistani women:

- There was a desire for better access for pushchairs on buses without having to fold them.
- Public transport was seen to have greater safety problems than taxis (in contrast to young peoples views above) Waiting for and travelling on buses were both thought to be unsafe at times.
- The distance between bus stops was thought to be too great and cause difficulties for the elderly and infirm.
- Train journey times are much quicker than bus if the option is available;
- Language and cultural barriers prevent some women from using buses. Some had experienced racism and unhelpfulness from bus drivers, others said they did not understand how to buy a ticket etc. and would welcome being shown how.

Consultation and Information

Asian male drivers:

- There is a lack of information about changes to timetables. Leaflets on buses do not reach the casual user.
- Language barriers made the publicity for services and timetables ineffective, particularly amongst elderly Asian people.
- It was felt that it would be difficult to change people’s attitudes away from thinking that the car is easier to use and that public transport is less effective;
- The group thought that advertising would have no effect on attitudes.
- Consultation was seen to be very important, and that the community should be involved in local issues. Community centres, health centres and other local amenities were seen as the best ways to consult.

Asian young people:

- The level of bus information and notification of timetable changes was criticised, not all bus stops had information.
- Consultation was seen as very important, particularly about timetables, routes and other local issues that would affect them directly.
- Young people said they were more likely to use teletext or the internet.

Pakistani women:

- Language was again cited as a major problem - timetables and other information should be in Asian languages.

- Information should be displayed in community centres, supermarkets, doctors' surgeries etc. so that people would not have to go out of their way to plan a journey.

### In-depth Interviews

Pataan, Bengali and Gujarati women:

- Only the Gujarati women worked, 3 of them used a car to get to work, the other 2 walked, although one of the drivers occasionally walked.
- 2 of the women travel about on business, one by car, one by bus.
- 4 travel to school/college, 3 by car, one walks.
- 9 women accompany their children to school, 3 by car, 6 walking.
- Various forms of transport were used for shopping at different times depending on the nature of the purchases to be made. The responses indicated 11 go by car, 9 walk, 6 use the bus, 2 taxi and one cycles.

Similar issues arose in the interviews as in the focus groups. These can be summarised as:

- Language and cultural barriers.
- Public transport unreliability/punctuality.
- Public transport high fares.
- Make walking safer, e.g. better lighting and CCTV.
- More traffic calming, speed reduction, road safety measures.
- Benches on pedestrian routes to allow the less physically able to rest on the way to local amenities.
- Increasing charges on cars was not popular as many depended on the car for cultural reasons.
- All wanted to be consulted about local transport issues and thought community centres and medical practises were the best way of doing this.

## **5. ACTION TAKEN WITH RESPECT TO CONSULTATION SUGGESTIONS**

Many of the comments received are addressed in the LTP as part of the "menu" of measures available to the partners when detailed implementation programmes are being prepared. For example, we know that the presentation of timetable information, and its provision at every bus stop, is important to many people. We know that public transport reliability and frequency are factors that will attract more people to use buses and trains more often. We know that there is a general feeling against measures that make life more difficult or more expensive for the private motorist, although these become more acceptable with a good public transport alternative in place.

None of these are groundbreaking revelations, but they do reinforce, and in some cases correct, the authorities' perceptions of what people want from a public transport system. Some views are contradictory and mutually exclusive and the challenge is to satisfy, as far as possible as many transport needs as possible without seriously disadvantaging one group in order to benefit another. The LTP partners now have a broader understanding of the inter-relationship between the needs of different groups of people and it is hoped, through the process of public participation, that the different user groups

will better understand each other's needs.

Key specific messages relating to objectives and overall strategic approach, and the actions taken in response, are summarised in Table 1.

<b>Comment</b>	<b>Respondent(s)</b>	<b>Action Taken</b>
<b>Objectives</b>		
Environmental and social objectives should be given more priority	Interest and Community Group Seminar	Objectives have been revised and presentation amended to clarify equal status of objectives.
Road traffic reduction should be a fundamental objective of the Plan	Friends of the Earth and other environmental groups	The objective has been amended, but not to the extent sought by some respondents  A key target is to prevent traffic growth across the Leeds cordon.
<b>Strategic Approach</b>		
The West Yorkshire Authorities should adopt a road user hierarchy.	Friends of the Earth and other environmental groups	An order of consideration is proposed for formal adoption
The plan should include proposals for a West Yorkshire cycle network.	Cycling groups	The development of cycling networks is proposed
Transport infrastructure should be well maintained	Brochure questionnaire respondents	Maintenance is given a high priority within the Plan programme.
Some charging measures (e.g. charging for workplace parking or motorway use) would be unacceptable	Brochure questionnaire respondents  Market research	Such charges are not proposed.
There should be better facilities for disabled people	Brochure questionnaire respondents	The Plan places considerable emphasis on improving the accessibility of the transport system.
More priority should be given to enforcement	Interest and Community Group Seminar	Ongoing discussions are being held with the Police regarding enforcement. The Plan includes provision for investment in camera technology to aid enforcement.
Greater priority should be given to measures to encourage walking	Interest and Community Group Seminar	Pedestrians are placed at the top of the hierarchy of consideration.  Greater expenditure is proposed on measures to assist pedestrians.

*Table 1: Summary of Consultation Responses and Actions*

We recognise the importance of public consultation and participation in scheme development and implementation and are developing models to ensure good practice throughout the Plan period. This will include further and continuing involvement with the interest and community group representatives who have already contributed so enthusiastically towards the development of the Plan. The debate will continue over the broader issues of priorities and objectives in that forum.

Consultation will also continue at district level over the detailed content of programmes and on individual schemes as they affect local communities.

## **ROAD TRAFFIC REDUCTION ACT REPORT**

### **BACKGROUND**

1. The Road Traffic Reduction Act 1997 requires all local authorities to carry out an assessment of existing levels of traffic on local roads and a forecast of expected local traffic growth. All authorities are then required to consider targets for reducing the level of local road traffic or its rate of growth.
2. The West Yorkshire authorities have been actively pursuing the reduction of traffic growth through the development of the transport package measures in recent years. We have developed and set up comprehensive monitoring procedures as part of this process, details of which are presented in the Annual Progress Report.

### **ASSESSMENT OF EXISTING TRAFFIC LEVELS**

3. Monitoring of traffic in the county has been carried out for many years. Reports on countywide statistics are produced on an annual basis and individual District reports are updated every two years.

#### ***Manual Traffic Counts***

4. The Local Transport Plan guidance makes reference to the DETR National Traffic Census. In West Yorkshire this represents a count programme of over 250 counts undertaken on a rolling 3-year programme. Count locations vary from motorways to minor roads and each count is undertaken on one weekday from 0700 - 1900.
5. Data is available from 1979 to the present year and since 1986 has been fully computer based. Further consideration will be given to carrying out further counts to complement the DETR National Traffic Census and to develop a series of cordons and screen lines to facilitate more effective monitoring.

#### ***Automatic Traffic Counts***

6. Traffic flows throughout West Yorkshire have been monitored using automatic traffic counters since 1979. This long term monitoring programme is organised on a four year rolling programme and concentrates on screen lines and cordons in the main urban areas. Approximately 100 sites are counted annually to monitor traffic growth.
7. The long term monitoring programme will continue. Selective continuous monitoring of traffic flows is being introduced in some locations. In the future, automatic vehicle classification and other developments of monitoring will be considered, together with any requirements arising from national guidance on reducing traffic flows.

#### ***Roadside Interview Surveys***

8. This is the area in which we have the least up to date information. The last countywide set of Roadside Interviews was done in 1986. There are currently no firm proposals for repeating this exercise. However, several ad-hoc RSI surveys have been conducted in all districts since that date. Further consideration will be given to updating this type of data in the future.

## RESULTS OF MONITORING

### Traffic Growth

9. The growth in traffic across West Yorkshire is shown in Table 1 and graphically in Figure 1. The West Yorkshire figures are derived from the Automatic Count programme

Year	West Yorkshire Growth - All Roads	West Yorkshire Trend Line	National Traffic Growth
1989	100.0		100.0
1990	102.5	102.0	101.0
1991	103.5	104.0	101.2
1992	106.0	104.7	101.3
1993	104.6	106.0	101.3
1994	107.4	106.4	103.9
1995	107.1	107.5	105.9
1996	108.0	108.1	108.7
1997	109.3	107.5	111.2
1998	105.3	107.7	112.9
1999	108.5		

Table 1: West Yorkshire Traffic Growth 1989-1999

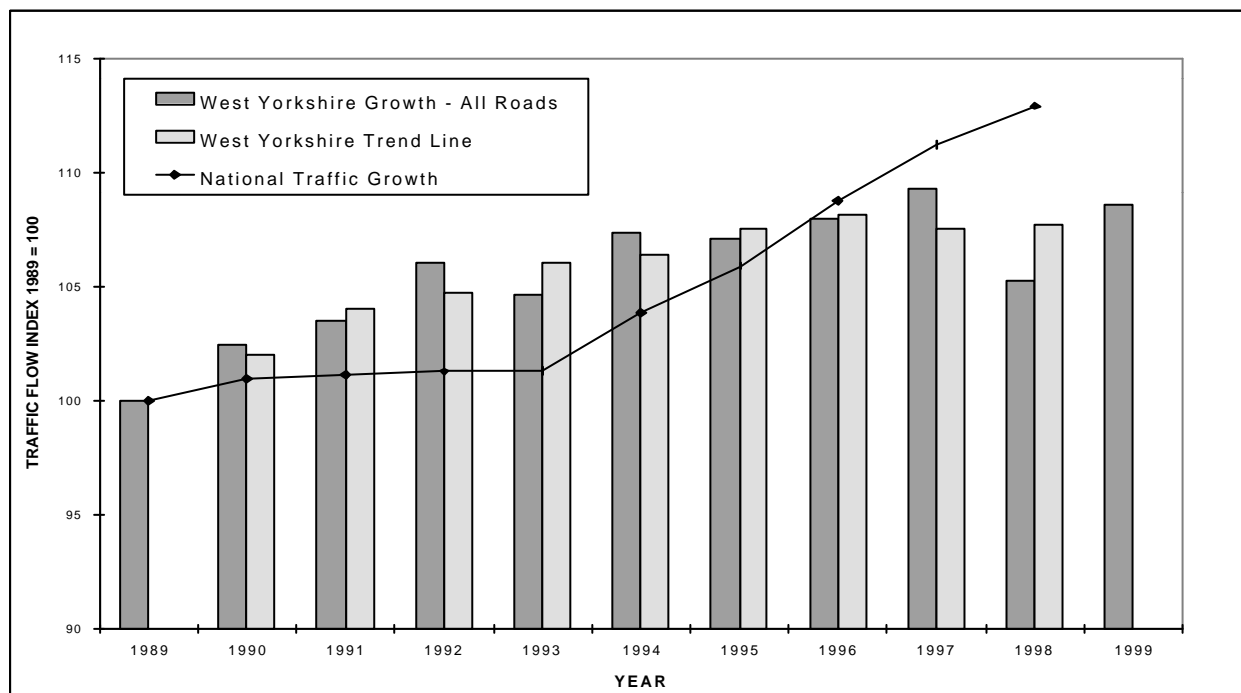


Figure 1: West Yorkshire Traffic Growth 1989-1999

10. The statistics for individual years should only be used as a broad indication of traffic growth as in some cases the number of roads included in the sample is small. The

3-year moving average trend line shown on the graph gives a more robust indication of traffic growth.

11. In addition we have central area cordon and screen line information for all major urban areas. A reduction in the growth of traffic in all main centres is considered essential if the primary objectives are to be achieved. Data presented for the peak hours and peak periods in Tables 1 to 5 show the progress made in curbing traffic growth measured against a 1990 baseline.

<b>Year</b>	<b>Peak Hour (0800 to 0900)</b>	<b>Peak Hour Index (1990=100)</b>	<b>Peak Period (0700 to 1000)</b>	<b>Peak Period Index (1990=100)</b>
1990	18,180	100	43,660	100
1993	19,120	105	45,450	104
1995	18,860	104	45,340	104
1997	18,750	103	45,800	105
1999	18,550	102	45,600	104

*Table 2: Bradford Central Cordon - AM Peak Period Inbound Traffic Flows*

<b>Year</b>	<b>Peak Hour (0800 to 0900)</b>	<b>Peak Hour Index (1990=100)</b>	<b>Peak Period (0700 to 1000)</b>	<b>Peak Period Index (1990=100)</b>
1990	8,550	100	19,810	100
1993	8,940	105	21,370	108
1995	9,480	111	22,530	114
1997	9,120	107	22,590	114
1999	9,360	109	22,890	115

*Table 3: Halifax Central Cordon - AM Peak Period Inbound Traffic Flows*

<b>Year</b>	<b>Peak Hour (0800 to 0900)</b>	<b>Peak Hour Index (1990=100)</b>	<b>Peak Period (0700 to 1000)</b>	<b>Peak Period Index (1990=100)</b>
1990	11,340	100	28,570	100
1993	11,500	101	28,430	100
1995	12,150	107	30,680	107
1997	12,324	109	31,360	110
1999	11,183	99	28,730	101

*Table 4: Huddersfield Central Cordon - AM Peak Period Inbound Traffic Flows*

<b>Year</b>	<b>Peak Hour</b>	<b>Peak Hour Index</b>	<b>Peak Period</b>	<b>Peak Period Index</b>
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	(0800 to 0900)	(1990=100)	(0700 to 1000)	(1990=100)
1990	35,596	100	87,180	100
1992	38,144	107	94,877	109
1994	34,631	97	88,423	101
1996	33,892	95	88,883	102
1998	34,380	97	92,330	106

*Table 5: Leeds Central Cordon - AM Peak Period Inbound Traffic Flows*

Year	Peak Hour (0800 to 0900)	Peak Hour Index (1990=100)	Peak Period (0700 to 1000)	Peak Period Index (1990=100)
1990	10,110	100	24,940	100
1992	9,710	96	24,300	97
1994	9,970	99	24,140	97
1996	9,850	97	24,360	98
1998	9,712	96	24,734	99

*Table 6: Wakefield Central Cordon - AM Peak Period Inbound Traffic Flows*

12. The data shows that although there are variations across the county, in general traffic levels are growing less than the national average.

### TRAFFIC FORECASTS AND TARGETS

13. We are committed to setting challenging but realistic targets against which progress can be judged. To help in assessing the compatibility between our proposed targets and strategy, we commissioned the Transport Research Laboratory (TRL) to develop a strategic transport model for the County.

14. The West Yorkshire Strategic Transport Model is a flexible multi-modal modelling analytical tool capable of forecasting the impacts of the Local Transport Plan strategy at a sufficient level of accuracy to enable realistic targets to be set based on analysis of the output. The model includes predictions on economic activity and land use patterns.

15. The model is capable of providing answers to 'what if?' questions, and can be used as part of an iterative process to determine an acceptable balance between the desired targets and the means to achieve them. It is able to take account of the majority of the strategy measures included in the Local Transport Plan except those specifically aimed at walking and cycling.

16. The predicted impacts include changes in absolute trip numbers by mode as well as changes in vehicle and passenger kilometres. Impacts upon vehicle speeds and CO<sub>2</sub> emissions are also available. The model is also capable of predicting impacts within discrete geographical areas, for example for each of the five main West Yorkshire Centres; smaller satellite towns; by District and County-wide. Impacts for both morning peak period and inter peak are achievable, together with predictions of future year conditions.

### **Forecasts**

17. The demand for travel in terms of vehicle km is currently available from the DETR's TEMPRO program. The predictions of demand for car travel from 1999 to 2006 in West Yorkshire range from 8.5% for the low growth prediction to 15.2% for high growth. The median is 11.9% growth. For 1999 to 2011 the predicted low growth is 14.8% and the high growth is 24.6% with a median of 19.7%

18. These figures should be taken as a 'do-minimum' scenario as they do not take account of the strategies being undertaken as part of the Local Transport Plan.

19. If the West Yorkshire Trend Line, shown in the 'Results of Monitoring' section (above), is projected forward there should be very little traffic growth across the county. However, this does not take into account the economic growth of the region. We consider that the TEMPRO low growth predictions more accurately reflect the underlying trend in traffic growth for the next few years.

### **Targets**

20. The Strategic Transport Model has been used to establish robust targets for the Local Transport Plan. The targets are based on the forecast changes from the 1999 base to 2006. These may be compared with a Do Minimum forecast for 2006.

21. Targets have been set for morning peak travel by car, bus and train inbound across the monitoring cordons for the five main centres. Countywide all day targets are also set for these three modes, based on trips ends within West Yorkshire, and based on the inter peak and am peak output.

22. The Strategic Traffic Model models the am peak hour (0800-0900) and an average inter peak hour. It is assumed that forecast percentage changes in mode use for the morning peak hour will apply equally to the peak period (0730-0930), which is being monitored on the central cordons. Factors to derive weekday car flows have been based on data from the 16-hour Automatic Traffic Count sites (4x am peak hour plus 10.6x the inter peak). Factors for bus and rail use to derive daily patronage have also been taken from a paper relating to Supertram Line 1 (2.70x am peak hour plus 8.05x the inter peak).

23. We recognise that continued increase in road traffic in the county is not acceptable and have therefore set objectives of reducing the rate of growth in road traffic and encouraging a greater proportion of journeys by public transport, cycling and walking. Use of the Strategic Traffic Model has shown that with the likely level of resources and the types of measures proposed it will not be possible in the 5-year period of the Local Transport Plan to actually reduce overall traffic levels.

24. The targets that have been set are based on the Local Transport Plan objectives. The environmental, social and economic objectives relevant to traffic growth are:

- to improve environmental quality and reduce the impacts of transport on air quality and noise;
- to contribute to national and international efforts to reduce the contribution of transport to overall greenhouse gas emissions.
- to improve safety, security and health, in particular to reduce the number and severity of road casualties;
- to improve operational efficiency within the transport system;

25. In addition we have agreed a number of subsidiary objectives that are not considered to be ends in themselves but are important in achieving the primary objectives. These include:

- to reduce the general rate of growth in road traffic and, where feasible, to reduce absolute traffic levels;

26. The full set of targets is given in the Local Transport Plan. These include the Road Traffic Reduction Targets shown in Table 7.

<b>Targets</b>	<b>Start Date</b>	<b>Target Date</b>
• traffic growth not to exceed 5% (16 hour, all roads)	1999	2006
• am peak inbound traffic crossing cordons round Bradford, Halifax, Huddersfield and Wakefield centres not to grow by more than 3%	1999	2006
• am peak inbound traffic crossing a cordon round Leeds centre not to increase	1999	2006

*Table 7: Road Traffic Reduction Targets*

27. These targets are considered to be realistic targets that take account of the resources that are likely to be available and the impact of the measures that are included in our Local Transport Plan strategy.

## **LINKS BETWEEN NATIONAL AND REGIONAL TRANSPORT POLICY AND THE WEST YORKSHIRE LOCAL TRANSPORT PLAN STRATEGY**

1. In July 1998 the DETR published its' Transport White Paper, 'A New Deal For Transport: Better For Everyone', the first comprehensive transport White Paper for 20 years. This document sets out the Government's integrated transport policies aimed at tackling the problems of traffic congestion and pollution and provides the framework within which detailed policies will be taken forward.

2. The Regional Assembly have produced a strategic framework for the region set out in the document 'Yorkshire and Humberside - Advancing Together into the Millennium'. Additionally, draft Regional Planning Guidance (RPG), 'Advancing Together: Towards A Spatial Strategy', was published in October 1999 setting out a spatial strategy for Yorkshire and the Humber. It includes a draft Regional Transport Strategy which sets out key transport objectives for the region.

3. Table 1 summarises the relationship between national transport objectives contained in the Transport White Paper, draft Regional Planning Guidance and Regional Transport Strategy objectives and those contained in the West Yorkshire Local Transport Plan Strategy. It clearly demonstrates that the Plan is consistent with both the national and regional transport policy frameworks.

THEME	GOVERNMENT TRANSPORT WHITE PAPER PRIMARY OBJECTIVES	REGIONAL PLANNING GUIDANCE KEY OBJECTIVES	REGIONAL TRANSPORT STRATEGY KEY OBJECTIVES	WEST YORKSHIRE LTP STRATEGY KEY OBJECTIVES
ECONOMY	<ul style="list-style-type: none"> <li>To contribute to an efficient economy, and to support sustainable economic growth in appropriate locations</li> </ul>	<p><i>Maintenance of high and stable levels of economic growth and employment:</i></p> <ul style="list-style-type: none"> <li>Regeneration of areas damaged by past industrial decline</li> </ul>	<ul style="list-style-type: none"> <li>To maintain and improve the quality of service provided by strategic road and rail links within the region</li> <li>To achieve a transfer of freight traffic from road to rail and water</li> </ul>	<ul style="list-style-type: none"> <li>To provide opportunities for fostering a strong, competitive economy and sustainable economic growth</li> <li>To improve operational efficiency within the transport system</li> <li>To maintain transport infrastructure to standards to allow safe and efficient movement of goods and people</li> </ul>
SOCIAL	<ul style="list-style-type: none"> <li>To promote accessibility to everyday facilities for all, especially those without a car</li> <li>To improve safety for all travellers</li> </ul>	<p><i>Social progress which recognises the needs of everyone:</i></p> <ul style="list-style-type: none"> <li>Seeking social equity and inclusion</li> <li>Protecting rural communities and recognising their particular needs</li> </ul>	<ul style="list-style-type: none"> <li>To increase the accessibility of rural areas by public transport</li> <li>To reduce the number of deaths and serious injuries on the roads</li> </ul>	<ul style="list-style-type: none"> <li>To promote social inclusion and equal opportunities for access to transport.</li> <li>To improve safety, security and health, in particular to reduce the number and severity of road casualties</li> </ul>
ENVIRONMENT	<ul style="list-style-type: none"> <li>To protect and enhance the built environment</li> </ul>	<p><i>Effective protection of the environment:</i></p> <ul style="list-style-type: none"> <li>Making full use of urban land</li> <li>Protecting natural resources</li> <li>Tackling urban traffic congestion and reducing transport-related emissions</li> <li>Making urban areas attractive to live in.</li> </ul> <p><i>Prudent use of natural resources:</i></p> <ul style="list-style-type: none"> <li>Protecting critical natural resources</li> </ul>	<ul style="list-style-type: none"> <li>To reduce the rate of growth in road traffic</li> <li>To contribute to the achievement of air quality standards through a reduction in road traffic emissions</li> <li>To contribute to a reduction in greenhouse gas emissions</li> </ul>	<ul style="list-style-type: none"> <li>To improve environmental quality and reduce the impacts of transport on air quality and noise</li> <li>To contribute to national/international efforts to reduce the contribution of transport to overall greenhouse gas emissions.</li> </ul>
ALL	<ul style="list-style-type: none"> <li>To promote the integration of all forms of transport and land use planning, leading to a better, more efficient transport system</li> </ul>	<ul style="list-style-type: none"> <li>Minimising travel needs and maximising use of energy efficient modes</li> <li>Limiting pollution</li> <li>Reducing energy consumption and encouraging use of renewable energy sources</li> </ul>		

Table 1: Linkages Between National/Regional Transport Policy and The West Yorkshire LTP

<b>WEST YORKSHIRE LOCAL TRANSPORT PLAN</b> (Overall Strategy including Major Schemes)		Problems: increasing traffic levels, congestion, public transport reliability, decline in bus use, increasing casualties, poor quality infrastructure	1) Total Cost of the Plan £876m 2) Cost to Government £774m	
<b>OBJECTIVE</b>	<b>SUB OBJECTIVE</b>	<b>QUALITATIVE IMPACTS</b>	<b>QUANTITATIVE MEASURE</b>	<b>ASSESSMENT</b>
ENVIRONMENT	Noise	Reduction in traffic as compared with do-nothing will lead to reductions in noise levels.		Slightly beneficial
	Local air quality	Reduction in traffic as compared with do-nothing will lead to improved air quality.		Beneficial
	Greenhouse Gases	Reduction in traffic as compared with do-nothing will lead to reduced greenhouse gas emissions.	Decrease of 75,000 tonnes CO <sub>2</sub> equivalent per annum	Beneficial
	Landscape	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Townscape	City and Town centre proposals will facilitate significant improvements.		Beneficial
	Heritage of Historic Resources	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Biodiversity	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Water	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Physical Fitness	Pedestrian, cycling and travel awareness strategies encourage a healthier lifestyle, with more walking and cycling.		Beneficial

	Journey Ambience	Better public transport through bus and rail station improvements, real time information, new low floor buses, new rail rolling stock, new shelters, customer care training for bus drivers. Improved cycle and walking through development of cycling and pedestrian routes.		Beneficial
SAFETY	Accidents	Reduced accidents through reduction in traffic as compared with do nothing, road safety engineering measures and road safety education, training and publicity.	£54m NPV killed and serious injuries saved	Beneficial
	Security	Improvements through a personal safety strategy, including CCTV in town centres, bus and rail stations, lighting, infrastructure design, security staff at larger bus and rail stations, education and publicity.		Beneficial
ECONOMY	Transport Economic Efficiency	Significant improvements to bus journey times along quality corridors. Improvements to journey times along cycle and pedestrian routes. Reduction in vehicle operating costs through bus priorities and reduced congestion. Increases in car costs for some journeys from demand management measures.	Av. Bus journey times reduced by 3.5 mins. Av. Train journey times reduced by 3 mins.	Beneficial
	Reliability	Improved reliability of bus journey times along quality corridors. Improved journey time reliability for rail journeys to and from Leeds because of capacity improvements in Leeds. Reduced congestion compared with do nothing will provide more reliable car journey times.		Very Beneficial
	Wider Economic Impacts	The strategy supports general regeneration initiatives and in particular the areas of in East Leeds, Central Bradford and the former Coalfields area. City and Town centre proposals will assist the local economy.		Beneficial
ACCESSIBILITY	Option Values	Improvements to the available transport options for many areas and sections of the population.		Beneficial

	Severance	Overall, reduced traffic as compared with do-nothing will tend to reduce severance. The pedestrian strategy includes measures aimed at reducing severance. (Specific local impacts of major schemes to be assessed in their individual appraisals.)		Beneficial
	Access to the Transport System	The strategy includes significant initiatives to address social inclusion issues including an access strategy.		Beneficial
INTEGRATION	Transport Interchange	The strategy includes significant initiatives to improve passenger interchange between all modes. Strategy includes proposals to encourage interchange between road and rail or waterway		Beneficial
	Land-use policy	The strategy supports and is supported by land use policies, in particular through adoption of objectives and strategy in line with PPG13 and draft Regional Planning Guidance, parking standards and travel plans. Specific measures to support development proposals in UDPs		Beneficial
	Other Government Policies	Welfare to Work and New Deal for Communities. Health Improvement.		Beneficial

Table 1: Appraisal Summary Table - Overall Strategy including Major Schemes

<b>WEST YORKSHIRE LOCAL TRANSPORT PLAN</b> (Overall Strategy excluding Major Schemes)	Problems: increasing traffic levels, congestion, public transport reliability, decline in bus use, increasing casualties, poor quality infrastructure	1) Total Cost of the Plan £303m 2) Cost to Government £283m
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OBJECTIVE	SUB OBJECTIVE	QUALITATIVE IMPACTS	QUANTITATIVE MEASURE	ASSESSMENT
ENVIRONMENT	Noise	Reduction in traffic as compared with do-nothing will lead to reductions in noise levels.		Slightly beneficial
	Local air quality	Reduction in traffic as compared with do-nothing will lead to improved air quality.		Beneficial
	Greenhouse Gases	Reduction in traffic as compared with do-nothing will lead to reduced greenhouse gas emissions.	Decrease of 72,000 tonnes CO <sub>2</sub> equivalent per annum	Beneficial
	Landscape	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Townscape	City and Town centre proposals will facilitate significant improvements.		Beneficial
	Heritage of Historic Resources	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Biodiversity	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Water	(Any impacts from major schemes to be assessed in their individual appraisals)		Neutral
	Physical Fitness	Pedestrian, cycling and travel awareness strategies encourage a healthier lifestyle, with more walking and cycling.		Beneficial
	Journey Ambience	Better public transport through bus and rail station improvements, real time information, new low floor buses, new rail rolling stock, new shelters, customer care training for bus drivers. Improved cycle and walking through development of cycling and pedestrian routes.		Beneficial

SAFETY	Accidents	Reduced accidents through reduction in traffic as compared with do nothing, road safety engineering measures and road safety education, training and publicity.	£53m NPV killed and serious injuries saved	Beneficial
	Security	Improvements through a personal safety strategy, including CCTV in town centres, bus and rail stations, lighting, infrastructure design, security staff at larger bus and rail stations, education and publicity.		Beneficial
ECONOMY	Transport Economic Efficiency	Significant improvements to bus journey times along quality corridors. Improvements to journey times along cycle and pedestrian routes. Reduction in vehicle operating costs through bus priorities and reduced congestion. Increases in car costs for some journeys from demand management measures.	Av. Bus journey times reduced by 3.4 mins. Av. Train journey times reduced by 3 mins.	Beneficial
	Reliability	Improved reliability of bus journey times along quality corridors. Improved journey time reliability for rail journeys to and from Leeds because of capacity improvements in Leeds. Reduced congestion compared with do nothing will provide more reliable car journey times.		Beneficial
	Wider Economic Impacts	The strategy supports general regeneration initiatives and in particular the areas of in East Leeds, Central Bradford and the former Coalfields area. City and Town centre proposals will assist the local economy.		Slightly Beneficial
ACCESSIBILITY	Option Values	Improvements to the available transport options for many areas and sections of the population.		Beneficial
	Severance	Overall, reduced traffic as compared with do-nothing will tend to reduce severance. The pedestrian strategy includes measures aimed at reducing severance. (Specific local impacts of major schemes to be assessed in their individual appraisals.)		Beneficial

	Access to the Transport System	The strategy includes significant initiatives to address social inclusion issues including an access strategy.		Beneficial
INTEGRATION	Transport Interchange	The strategy includes significant initiatives to improve passenger interchange between all modes. Strategy includes proposals to encourage interchange between road and rail or waterway		Beneficial
	Land-use policy	The strategy supports and is supported by land use policies, in particular through adoption of objectives and strategy in line with PPG13 and draft Regional Planning Guidance, parking standards and travel plans. Specific measures to support development proposals in UDPs		Beneficial
	Other Government Policies	Welfare to Work and New Deal for Communities. Health Improvement.		Beneficial

*Table 2: Appraisal Summary Table – Overall Strategy excluding Major Schemes*

# WEST YORKSHIRE BUS STRATEGY



WY  
PTA  
Poli  
cy

To ensure, in partnership with operators, highway

authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from the car

July 2000

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## FIGURES

Figure 1: Bus network –  
10 minute frequency

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## APPENDICES

Appendix 1 - PTA policies

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## **STRATEGIC OVERVIEW**

### **Context**

This Bus Strategy has been prepared by the West Yorkshire Passenger Transport Authority in consultation with the District Councils, neighbouring authorities, bus operators and users groups. It is a strategy for the whole bus journey in order to meet the needs of people visiting, living in and working in West Yorkshire. The strategy primarily covers the five years from 2001 – 2006, but in some cases there are longer term proposals. However, the strategy may require alteration throughout this duration in order to meet changing needs.

The West Yorkshire Passenger Transport Authority's – (WYPTA) overarching policy for bus services in West Yorkshire is:

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

Other WYPTA policies relating to individual sections are listed in Appendix 1.

This Bus Strategy has been developed to fulfil this policy and to further our forward vision for public transport development and Local Transport Plan objectives (Table 1).

### **Vision**

The vision statement sets out a variety of requirements that are addressed throughout this strategy in order to ensure that buses become a reasonable alternative to the car.

*A Vision for Public Transport development:*

*To secure, in partnership with others, the development of high quality integrated public transport which is:*

- *easy to understand and easy to use;*
- *accessible to all*
- *attractive to all*
- *reliable;*
- *affordable;*
- *efficient;*
- *safe and secure.*

**Table 1: Local Transport Plan Objectives relevant to the Bus Strategy**

<b>Primary Objectives</b>	<b><i>Economic</i></b>	<b><i>Social</i></b>	<b><i>Environmental</i></b>
	<ul style="list-style-type: none"> <li>• to provide opportunities for fostering a strong, competitive economy and sustainable economic growth;</li> <li>• improvements to operational efficiency within the transport system;</li> <li>• to maintain the transport infrastructure to standards to allow safe and efficient movement of people and goods.</li> </ul>	<ul style="list-style-type: none"> <li>• to improve safety, security and health, in particular to reduce the number and severity of road casualties;</li> <li>• to promote social inclusion and equal opportunities for access to transport.</li> </ul>	<ul style="list-style-type: none"> <li>• to improve environmental quality and reduce the impacts of transport on air quality and noise;</li> <li>• to contribute to national and international efforts to reduce the contribution of transport to overall greenhouse gas emissions</li> </ul>
<b>Subsidiary Objectives</b>	<ul style="list-style-type: none"> <li>• to reduce the general rate of growth in road traffic and, where feasible, to reduce absolute traffic levels;</li> <li>• to encourage a greater proportion of journeys to be made by public transport, cycling and walking as alternative modes to the private car;</li> <li>• to improve integration between transport modes, between the various policy areas and the strategies of different relevant organisations.</li> </ul>		



The following table shows the relationship between the vision components and each section in terms of benefit to the passenger:

	easy to understand and to use	accessible to all	attractive to all	reliable	affordable	efficient	safe and secure
Information and Promotion	✓	✓	✓	✓		✓	
Bus stations, shelters and stops	✓	✓	✓			✓	✓
Ticketing	✓		✓	✓	✓	✓	
Network Coverage	✓	✓	✓	✓		✓	
Schools Transport	✓	✓	✓	✓	✓	✓	✓
Bus Priorities		✓	✓	✓		✓	
Vehicles and On-board Staff	✓	✓	✓	✓		✓	✓
Safety and Security measures	✓	✓	✓	✓			✓
Interchange	✓	✓	✓	✓	✓	✓	✓
Social Inclusion Strategies	✓	✓	✓	✓	✓	✓	✓
Land Use Planning		✓	✓			✓	✓

The Bus Strategy can only be delivered by the different organisations responsible for different aspects of the overall service acting in **partnership**.

<b>Metro</b>	Information, promotion, bus stations, shelters and stops, tendered services, administration of pre-paid tickets, concessionary fares, coordination.
<b>Bus operators</b>	Bus services, vehicles, on-board staff, information, promotion, tickets
<b>District Councils</b>	Bus priorities, kerb heights, parking restrictions, pedestrian routes, land use policy and development control, environmental policy and Air Quality action plans
<b>Police</b>	Enforcement of bus priorities and parking restrictions, personal safety.

**The Transport Act and Local Transport Plan Guidance**

The Transport Act (2000) will require:

<p>“Each local transport authority must prepare a document to be known as the bus strategy containing their general policies as to how best to carry out their functions in order to secure that-</p> <ul style="list-style-type: none"> <li>• bus services meet such of the transport requirements of persons within the authority's area as the authority consider should be met by such services,</li> <li>• bus services meeting such requirements are provided to the standards to which the authority consider that they should be provided, and</li> <li>• such additional facilities and services connected with bus services are provided as the authority consider should be provided.”</li> </ul>
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The Act will introduce a number of powers and duties to assist local authorities in implementing their strategies. Government Guidance on the Local Transport Plan sets out a number of issues that should be covered in a Bus Strategy. Our approach to these important issues is set out below with the detail provided in subsequent sections.

<i>Issue</i>	<i>West Yorkshire Bus Strategy Approach</i>
<b>Quality Partnerships</b>	The primary means of implementing the strategy will be through partnerships, including statutory agreements where this is appropriate.

<b>Ticketing</b>	The Transport Act will provide the framework for WYPTA to specify a multi-operator ticketing system to ensure that a range of sensibly priced, multi-mode, multi-operator tickets is available.
<b>Information</b>	Partnerships will be developed with the operators to enhance the quality of comprehensive information provision including operator contributions.
<b>Concessionary Fares</b>	It is anticipated that a scheme offering more comprehensive concessionary fares than those specified in the Act will continue to operate.
<b>Service Standards</b>	Standards of service expected of the operators and local authorities are specified in the Strategy
<b>Network Coverage</b>	A working party will be set up with the operators to consider how the network should be improved and how this can be achieved through commercial and tendered services
<b>Quality Contracts</b>	<p>The Transport Act will give authorities the power to introduce Quality Contracts where this is the only practicable means of achieving the objectives of the Bus Strategy. Within these contracts, the services for a particular area would be specified and a contract let to franchise these services to a single operator.</p> <p>We intend to implement the Bus Strategy through partnership working. However, in some circumstances, the powers to implement Quality Contracts may need to be used if the policies and standards within this document cannot be delivered through effective partnership working.</p>

The strategy considers each stage of a potential public transport journey in sequence, to ensure that all issues affecting the quality of bus travel are addressed.

<b>Information and Promotion</b>	People need to be aware of and to have readily accessible, easy to understand information about the bus services and tickets that are available.
<b>Bus stations, shelters and stops</b>	The waiting environment should be comfortable and secure and to project an image of a high quality service
<b>Tickets</b>	An understandable range of pre-paid and on-bus tickets need to suit a variety of travel patterns at a reasonable price
<b>Network coverage</b>	The network of bus services should suit people's travel needs at different times of the day
<b>School bus services</b>	These services should provide travel choice so the car is not the essential method of transport for school trips

<b>Bus priorities</b>	These should be provided in key area where congestion problems delay buses
<b>Vehicles and on-board staff</b>	Vehicles should be comfortable, accessible and well maintained. Onboard staff need to be friendly, offer advice on fares and able to deal with a variety of problems without threat of violence.

It is recognised that some issues cut across all aspects of the journey, in particular the following:

<b>Safety and security</b>	People need to feel and be safe throughout the whole bus journey
<b>Interchange</b>	Many journeys will require interchange between different services and modes. Future actions should make this as easy as possible

The Bus Strategy needs to relate to a number of broader policy issues.

<b>Social inclusion</b>	Many socially excluded people are dependent on bus services. They need to be accessible, affordable and provide services meeting their travel needs.
<b>Environment</b>	Bus services have an important role to play in offering an alternative to the car. Specific services may be needed as part of action plans developed under the Environment Act. Pollution caused by buses themselves needs to be reduced.
<b>Land Use</b>	Land use policy should encourage patterns of development suitable for sustainable bus use. Public transport accessibility should be incorporated into the design of new developments.

### Links with Neighbouring Authorities

People's transport needs do not recognise administrative boundaries. We are therefore working with neighbouring authorities to ensure that, as far as possible:

- joint proposals are developed for important cross-boundary corridors of travel;
- significant proposals close to administrative boundaries are discussed on a joint basis;
- links are developed to support economic regeneration on a regional and sub-regional level;

- ticketing systems are developed to assist cross-boundary travel;
- Bus Strategy objectives are not undermined by incompatible policies.

The West Yorkshire Bus Strategy will be used as a basis for consultation with neighbouring authorities as they develop their own Strategies.

### **Best Value**

The Local Government Act, 1999, established principles and procedures to ensure that Best Value is obtained in the delivery of services provided by local authorities. Over a five year period, all services provided by WYPTA and the District Councils will be subject to fundamental Best Value reviews to ensure that high standards are achieved and they provide good value for money. The timetable for relevant reviews is set out in Appendix 2. The authorities also have to prepare annual Best Value Performance Plans, which include reports on the review process and Best Value indicators. The indicators help to measure the performance of the authorities in comparison with similar organisations and, over time, will measure progress in improving performance. The Bus Strategy will form an important policy input to the service reviews and is one of the means through which performance in achieving our objectives will be improved. Proposals set out in the Bus Strategy may be modified if the review process establishes better ways of achieving our objectives.

### **Centre of Excellence**

The development of the full Plan has also reflected the Deputy Prime Minister's endorsement of West Yorkshire as 'an early centre of excellence for integrated transport'. A range of Centre of Excellence initiatives have been developed through joint working between the six authorities and a strong partnership with other agencies and with bus and rail operators, with the aim of providing practical examples of the development of integrated transport. The initiatives are under regular review to ensure that targets are met or, alternative solutions are developed where this is not practicable.

A progress report is included with the LTP submission.

### **Consultation**

The development of the Strategy has drawn on extensive public consultation carried out as part of the Local Transport Plan process, early consultation for Best Value reviews and previous consultation on public expectations for service quality.

The strategy has been discussed with local bus operators, Social Services, Planning Authorities, Education Authorities and other council bodies, and neighbouring authorities, with interest groups through LTP workshops and Local Passenger Consultative Committees.

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## **ISSUES AND TRENDS**

### **KEY ISSUES**

The key economic, environmental, social and transport issues are detailed within the Local Transport Plan, however the most relevant to the Bus Strategy are listed below. In addition, Council Unitary Development Plans and Economic Strategies are also relevant to bus planning.

- the diversity of West Yorkshire as a region;
- the population of West Yorkshire is expected to increase, with implications for housing demand, for employment and for transport provision;
- the forward planning framework is provided by the draft Regional Planning Guidance (which includes the draft Regional Transport Strategy) and Regional Economic Strategy. Sustainability is a key theme within these documents;
- economic development is a priority, with the economy of Leeds being important to the sub-region as a whole. Objective 2 funds and other regeneration initiatives will complement the regional economic development strategy;
- the forecast growth in car ownership and inherent usage and its associated health and environmental consequences unless attractive alternatives are developed and the demand for car travel is effectively managed;
- the opportunity to build upon a relatively strong public transport base (network coverage and patronage) with a priority being to reverse the decline in bus travel;
- tackling safety concerns, in particular for vulnerable groups;
- air quality standards in general and the requirement to develop transport Action Plans for air quality management areas;
- the poor condition of much of the existing transport infrastructure.

A number of other issues also need to be addressed.

- Circumstances of unreliability. Although, many instances are related to traffic congestion and lack of bus priority schemes particularly where services are commercial and in peak hours, others are owing to early / late running, drivers actions, lack of staff supervision (inspectors) by operators, unrealistic scheduling, mechanical failure and staff recruitment / retention problems. It is worth noting that operator initiatives to retain and recruit staff may result in increased fares
- Infrequency of evening, Sunday and non-city centre services. However, the improvement of core frequencies on a more widespread basis could result in increased subsidies thereby placing increasing strain on the tendered services budget.

- Bus service operation does not always assist current lifestyles and journey patterns. The traditional model of 9-5 working has in some instances been replaced by shift, teleworking, part time and flexi work. Shops open later and on Sundays. Leisure activities take place over longer periods of the day, in some cases moving towards '24 hour cities'.
- The quality of bus services and waiting facilities do not always live up to customer expectations. Inadequate at-stop information can prevent people from using public transport.
- The current range of multi-operator discounted tickets does not suit all patterns of work, training and leisure use. Some existing multi-operator tickets are currently relatively expensive in comparison with single operator tickets. Current multi operator ticketing schemes reflect the rail network rather the more localised bus journeys therefore better targeting of multi operator ticketing is required for local bus travel.

## **MARKET RESEARCH**

Research conducted some two years ago into public expectations of service standards indicated that primary concerns were:

- reliability and frequency;
- personal safety in the evening;
- staff attitudes;
- ease of use;
- cleanliness at boarding point;
- level of roadside information;
- timetable comprehension at stops – electronic display was cited as a possible solution.

Further research into the above through a Best Value Review of Passenger Information has indicated the following:

- there is a general satisfaction with information at outlets but not with the level of availability at stops;
- people have difficulty getting information in the evenings and at weekends;
- a sizeable minority of people were critical of the basic standards at bus stations in relation to waiting facilities, toilets, parking facilities, personal security, cleanliness and access for people with mobility problems.

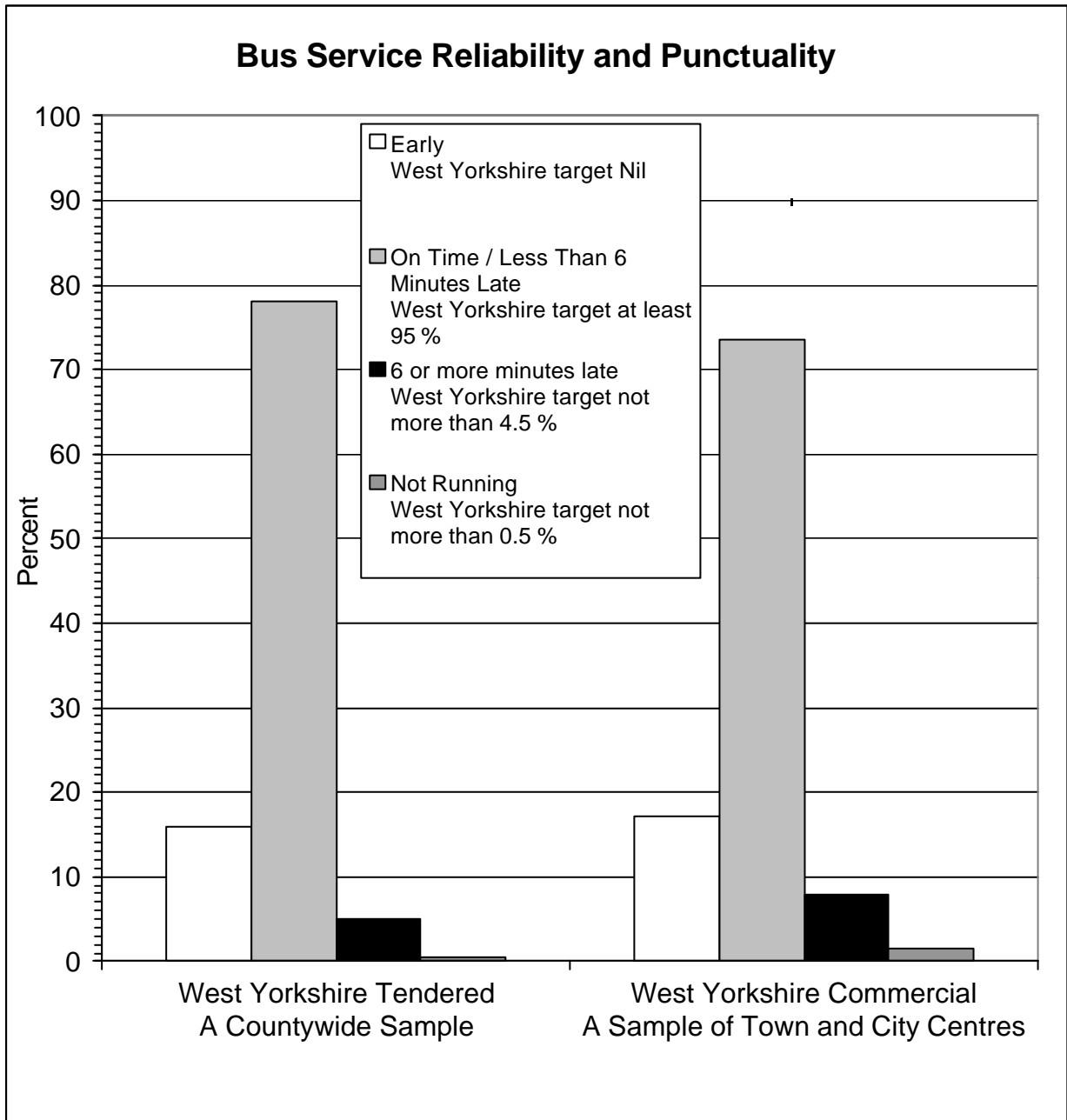
In addition to the above, buses being at the wrong time and at the wrong price were cited in the household survey conducted in connection with the Local Transport Plan.

The image of bus does not always match that of train, according to LTP questionnaires. 33% of people feel that there are severe problems with bus services compared to 25% with train services. Buses can be perceived as unreliable,

infrequent and expensive to use.

**RELIABILITY**

The following graph shows bus service reliability and punctuality in main areas. In some areas, there are high levels of poor punctuality. This strategy aims to address these incidences by a variety of methods detailed within subsequent chapters.

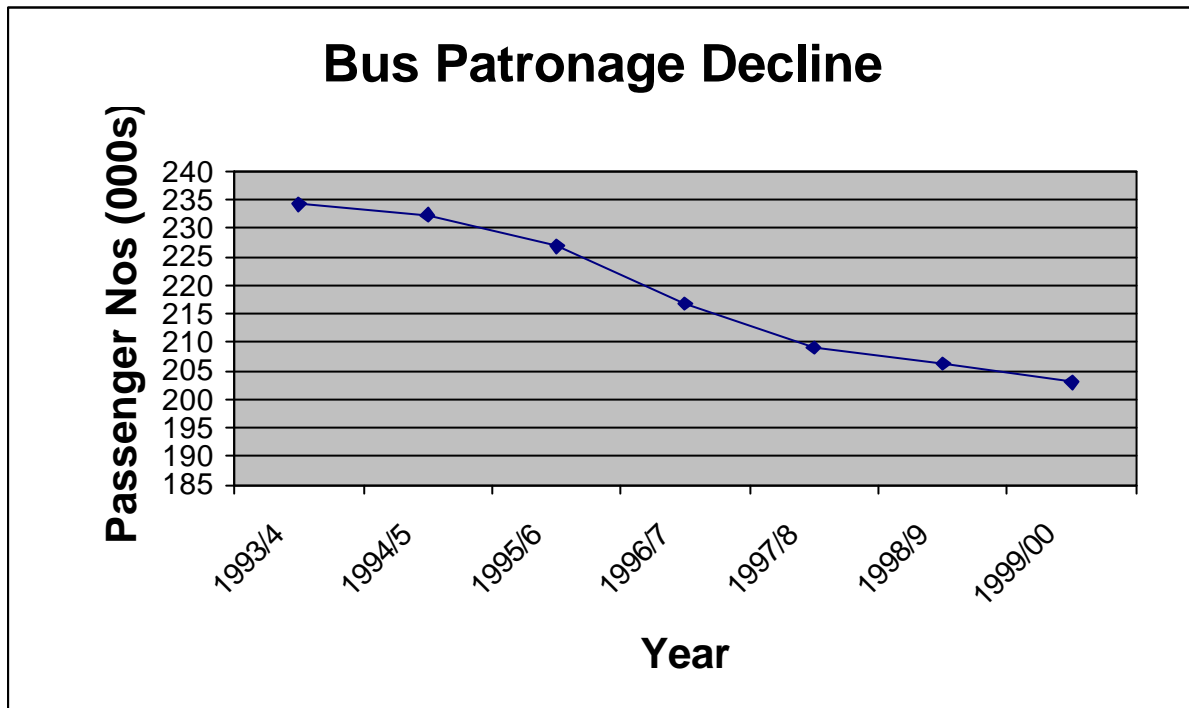




## PATRONAGE TRENDS

The following chart shows that bus patronage figures have consistently declined through the 1990s. However, early evidence suggests that Leeds and Huddersfield are experiencing a recent slight growth in patronage figures.

The figure for 1999/2000 is an estimate based on initial assessment.



According to recent research, some 70% of all journeys to work are made by car compared to 12% by bus. Two thirds of all shopping trips are by car and for two thirds of people the main mode of travel is also by car. In many cases the bus is only used if there is no other alternative, car is generally considered easier and more convenient.

## STRENGTHS/WEAKNESSES/OPPORTUNITIES/THREATS (SWOT) ANALYSIS

The following SWOT analysis has been developed from that endorsed for the full Local Transport Plan.

<b><i>Strengths</i></b>	<b><i>Weaknesses</i></b>
<ul style="list-style-type: none"> <li>• Comprehensive network of bus services</li> <li>• Integrated public transport information and ticketing</li> <li>• Partnership working</li> <li>• Integration with land-use planning, regeneration, education and health programmes</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of fully accessible bus infrastructure and services</li> <li>• Past dispersal of land-use activities</li> <li>• Restricted revenue resources</li> </ul>
<b><i>Opportunities</i></b>	<b><i>Threats</i></b>
<ul style="list-style-type: none"> <li>• Local Transport Plan</li> <li>• Transport Act</li> <li>• Best Value reviews</li> <li>• Regional Planning Guidance/Regional Transport Strategy</li> <li>• Road user charging in Leeds</li> <li>• Workplace and school travel plans and other TravelWise initiatives</li> <li>• Rural Bus Grant and Rural Bus Challenge funding</li> <li>• Developer contributions to bus facilities and services</li> <li>• Quality Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• Accelerated traffic growth as a result of increased car ownership</li> <li>• Increasing development of operator branded ticketing</li> <li>• Operators expectations of higher returns on investment</li> <li>• Difficulties in recruiting and retaining on-board staff</li> </ul>

## CONCLUSIONS

The following key issues need to be addressed in the Bus Strategy:

- reversing the decline in bus patronage;
- providing an appropriate level of at-stop information at key locations;
- providing a broad range of appropriately priced multi-operator, multi-modal tickets;
- improving coverage and frequency of the core bus network;
- improving the reliability of services;
- improving the overall quality and image of all aspects of bus services;
- promoting and encouraging bus use from an early age;
- addressing concerns regarding safety and security;
- adapting to changing economic and social circumstances.

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## **INFORMATION AND PROMOTION**

### **KEY ISSUES SPECIFIC TO INFORMATION AND PROMOTION**

**Providing an appropriate level of at-stop information at key locations and Improving the overall quality and image of all aspects of bus services by**

- Piloting more attractively presented and user friendly information at key bus stops
- Introducing Real Time Information
- Establishing a 60 day notice period for all service registrations and changes
- Extending the scope of information products subject to Best Value review

**Promoting and encouraging bus use by**

- Targeted promotion
- Promoting TravelWise initiatives
- Seeking new technological opportunities to capture a broad customer base

**Addressing concerns regarding safety and security by**

- Conducting anti-vandalism campaigns
- Promoting transport as a safe form of travel

### **NOW**

Metro is committed to making up to date public transport information in accessible formats using a range of high quality products available to customers.

Information is made available in a variety of ways:

- Printed timetable information and area travel guides covering all bus and train services in West Yorkshire available at most bus and rail stations and travel centres (totalling 400 outlets) and at approximately 4000 stops and shelters;
- A network of travel centres open from 0800 – 1800 hours providing information and selling a range of tickets;
- The Metroline Telephone Information bureau operating from 0800 – 2000 hours, now part of the Yorkshire Regional Transport Information Partnership, and local bus operator telephone enquiry lines. Calls made between 0700 - 0800 hours and 2000 – 2200 hours are diverted to South Yorkshire Passenger Transport Executive's call centre;

- Touch screen information points giving 24 hour access to comprehensive bus and rail journey planning, timetable display facilities and in some cases local tourist information;
- Electronic display screens at main rail stations and Leeds Bus Station;
- Passenger announcements at rail stations;
- An internet website ([www.metro-wyorks.co.uk](http://www.metro-wyorks.co.uk)) with links from Councils' own sites giving full Internet access to Metro information including local bus and train timetables and journey planning software;
- Large print and Braille timetables, minicom facilities, audible information pilots, disability awareness training for staff;

In partnership with operators and neighbouring authorities, information provision is being improved by combined databases and communication links, as part of the evolving National Public Transport Information System (PTI 2000) to be known as 'Traveline'. Metro received a grant of £70,000 in March 1999 to assist the development of the Yorkshire Regional Transport Information Partnership, 'Yorkshire TravelNET', formed by local authorities and bus operators. A regional website has been established as part of this. A grant of £150,000 to the partnership should enable a map based enquiry system to be developed for use in the call centres and on the website by September 2000;

Metro, the District Councils, bus and rail operators and other agencies instigate and participate in wide ranging promotional activity aimed at encouraging the public to make greater use of public transport, reduce dependency on and use of the car and provide a safer and less polluted environment. This is achieved by involvement in national and local campaigns, attending school and tourist events and by encouraging local employers to purchase company MetroCards and implement Travel Plans.

Metro's promotional strategy provides the framework for raising the profile and reputation of public transport, informing the public of Metro's role including prepaid tickets and concessions and public and media relations generally.

## **FUTURE**

There is a need to address the following issues:

- User friendliness of printed information;
- Accessibility of information at bus stops, particularly for new or irregular bus users;
- Availability of roadside information provision;
- Customers expect better information about the services they use, available at all times;
- Increasing demands on the Metroline service in particular owing to the increase of mobile phone calls;
- Advances in information and communications technology in relation to information

services.

Metro provides an impartial, comprehensive information service that is valued by the public. We wish to preserve this role, but recognise that the bus operators derive commercial benefit from the information service provided. We will therefore seek to develop partnerships with the operators that will secure financial contributions to the cost of improving information services within the framework of the Transport Act.

We intend to develop our information services by:

- Improving the user-friendliness of printed information, for example in the design of information at bus stops and by providing personalised travel information;
- Working in partnership with operators and neighbouring authorities as we move towards a national public transport information service. Providing multi-modal information, with developments towards this being considered within an EU funded research project, TRIDENT, and as part of the EU funded regional TARGET project;
- Securing through partnership, increased operator contributions to fund improvements;
- Using results of a current Best Value Review to target resources more effectively, in line with user needs;
- Increasing use of electronic displays at bus stations and other key points in the network;
- Seeking opportunities to provide 'Real Time Information';
- Using developments in information and communications technology, such as the Internet and mobile phones, to provide more accessible and comprehensive information.

Specific proposals to develop information services are shown in the following table.

In relation to promotion, there is a need to address the following issues:

- Using advertising and other awareness raising techniques to increase knowledge of public transport travel opportunities and products
- Poor image of the bus
- Vandalism of facilities
- Capturing new customers

Technology advances are not only increasing the customer base but have potential for targeted marketing.

**STRATEGY**

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
<b>1 – 2 YEARS</b>			
Include more user-friendly information and timetables at bus stops	To help new and irregular bus users	As part of a working group involving all partners	Metro / Operators
Develop internet services further including GIS journey planning, web enabled telephones, digital TV, accessible facilities and access to international travel	To capture new customers and improve accessibility	By taking advantage of evolving technologies	Metro
Trials of Real Time Information at bus stops and interchanges	To give up to date information to passengers	As part of quality partnerships	Metro and bus operators
Establish a 60 day notice period for service registrations and changes	To allow accurate timetables and information to be distributed	By agreement with operators	Metro and operators
Extend scope of roadside information	To enable passengers to understand quickly and accurately the range of services available	By including fares information, route maps and interchange opportunities	Metro and operators
Promoting Travelwise, <b>Target</b> and other related initiatives	To raise public and business community awareness of problems associated with non essential car use and encourage greater use	Partnership working with other countries, employers, developers, schools, education authorities, businesses, tourism venues, media etc	Metro and District Councils
Targeted promotion	Capture new markets (e.g. young adults)	Taking advantage of new technology such as website, mobile phone, web tv, internet	Metro

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
Schools project	To encourage usage from early years	Partnership working to promote public transport as a curriculum subject	Metro and Education Authorities
Anti vandalism campaigns	To encourage communities and in particular pupils to take pride in facilities	Partnership working through events at key venues	Metro, Education authorities and police
<b>3 – 5 YEARS</b>			
Real Time Information	To give up to date information to passengers on key corridors, at home and in work	As part of quality partnerships	Metro and bus operators
Develop use of information and communication technology	To improve accessibility of information products	By investigating new initiatives	Metro
Targeted activity	Develop loyalty schemes	Information from prepayments customer data	Metro
<b>6+ YEARS</b>			
Advanced Information Strategy to integrate information and ticketing	Providing customised information to take account of differing languages and disabilities according to coding on smartcard. To link ticket purchase to information provision via e-commerce opportunities such as internet, mobile phones, info points etc. To enable seamless ticketing such as venue and transport tickets	As part of quality partnerships and other schemes	Metro and Operators

It is envisaged that some of the above initiatives will be pursued through developer and other privately financed contributions.



## **BUS STATIONS, SHELTERS AND STOPS**

### **KEY ISSUES SPECIFIC TO STATIONS, SHELTERS AND STOPS**

#### **Improving the overall quality and image of all aspects of bus services by**

- Enhancing the waiting environment such as installing high quality bus shelters, improving maintenance and cleaning standards and addressing problems of vandalism and graffiti

#### **Addressing concerns regarding safety and security by**

- Extending CCTV coverage and using CCTV to deter and respond to anti social behaviour
- Working with Crime and Disorder Partnerships to improve awareness and deter antisocial behaviour

### **NOW**

The quality, state of maintenance and general ambience of the facilities where people wait for buses contribute significantly to the overall image of bus travel. Metro operates 20 of the 24 bus stations and is also responsible for over 13,800 bus stops in West Yorkshire, approximately one in four of which have shelters (around 3300 are maintained by Metro and approximately 600 are provided and maintained under a commercial contract for advertising purposes).

A significant programme of works has been adopted to upgrade bus stations and ensure that they provide accessible facilities for disabled people. CCTV has been installed covering most bus stations linked to a central control centre in Leeds.

New shelters are being installed, with priority being given to partnership schemes that include bus priorities and/or other measures to improve the quality of bus services along corridors of travel or in town and city centres. These measures include the provision of higher quality vehicles by the bus operators and works to improve the accessibility of bus services for disabled people, such as raising of kerbs at bus stops by the District Councils.

An accessibility checklist has been adopted to ensure that the needs of disabled people are considered in all aspects of the design of new facilities.

### **FUTURE**

A strong programme to upgrade bus infrastructure is already in place and will continue to be developed. There is a need ensure that the following issues are addressed:

- Providing facilities at *all* key interchange points within the bus network and at rail

stations;

- Increasing the rate of replacement of bus shelters, stops and information products to ensure consistent standards of weather protection, illumination and visibility are achieved;
  - Design to improve personal security (proposals to form part of an overall safety strategy);
  - Achieving standards consistent with the Disability Discrimination Act at all bus stations / shelters and stops with an ongoing programme of works;
  - Design of stops and shelters to include stop specific location names and city centre key location directional signage information;
  - Improved standards of maintenance of bus stations, stops and shelters to deter instances of vandalism and offensive graffiti.
  - Countywide standardisation of bus stop / shelter siting and the use of clearways;
- Specific proposals are set out in the following table.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1 – 2 YEARS</b>			
Finalise bus station upgrades	To modernise facilities and create a safe and accessible environment	LTP, PTA and operator funding	Metro and operators
Ongoing programme of bus shelters installation	To modernise facilities and create a safe environment	LTP funding and developer contributions	Metro
DDA works at bus stops	To improve access to bus services	LTP funding	Metro and District Councils
Anti vandalism campaigns	To discourage vandalism and encourage communities to take pride in facilities	Working with operators and the police	Metro and operators

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
Developing mini-interchanges	To assist interchange between bus services and with rail	LTP funding	Metro, District Councils and operators
To provide an appropriate level of directional signs on bus stop plates at key locations	To assist people who have not used public transport before or are new to the area	By looking at opportunities as part of a working group	Metro and operators
<b>3 – 5 years</b>			
Creating a 'people' environment	To create attractive facilities that encourage people to use public transport	Shops, cafes etc at bus stations, bus station user groups, public art, events etc	Metro to lead

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## **TICKETING**

### **KEY ISSUES SPECIFIC TO TICKETING**

**Providing a broad range of competitively priced multi-operator, multi-modal tickets and**

**Adapting to changing economic and social circumstances by**

- Extending the range of multi operator, multi modal tickets
- Improving ease of prepaid ticket renewal
- Introducing smartcard to provide more flexible ticketing and concessionary travel facilities

### **NOW**

Pre-paid, multi-modal, multi-company tickets provide an efficient means of using the public transport network and encourage greater public transport use. They benefit passengers through discounted fares and ease of use, and the operators through faster boarding times and building passenger loyalty. We wish to expand their use by extending the range and scope of such tickets.

Metro administers a prepaid ticket scheme on behalf of some 40 bus (and 5 rail) companies operating within West Yorkshire, some of whom also operate their own schemes. Current provision includes:

- the Metro range of prepaid tickets offering value for money for commuters (weekly, monthly, quarterly and annual MetroCards), leisure travellers (DayRover);
- MetroRover tickets, funded by the operators, for unemployed people and certain people participating in the Government's Welfare to Work Initiative, The New Deal for 18 to 24 year olds;
- a cross boundary MetroMaster ticket for bus travel in West and South Yorkshire;
- operator branded prepaid ticketing offering discounts off cash fares.

### **FUTURE**

MetroCard is a strong, well-established brand name and we will continue to build on the success of these tickets. However, there is a need to address the following issues:

- The current lack of a financially attractive multi-operator, multi-modal pre-paid ticket option if using public transport less than 5 days a week;
- Better targeting of multi operator tickets for local bus travel;
- Poor information about fares;

- The complexity of fares;
- Potential confusion among passengers, with a proliferation of different single operator tickets;
- Achieving a sensible relationship between multi-modal, multi-operator tickets and cheaper single operator tickets;
- Extension of the scope of cross-boundary tickets;

Specific opportunities to address these issues will come through:

- The powers that will be provided by the Transport Act for local authorities to specify a pre-paid ticketing scheme;
- The introduction of smartcard tickets
- The availability of prepaid ticket purchase via the Internet and Metroline.

Smartcard technology offers a number of potential advantages for public transport ticketing and service planning, including:

- Facilitating through ticketing between different services;
- Providing a range of prepaid ticketing options;
- Accurate and efficiently collected information to distribute pre-paid ticket payments to operators and reimburse them for concessionary travel;
- Journey information so that services can be planned and tickets can be targeted to meet demand;
- Speedy, efficient boarding arrangements for passengers.

Metro is leading the Integrated Transport Smartcard Organisation (ITSO) in developing national implementation standards for multi-modal, multi-operator smartcard systems for public transport. Metro is already working with bus operators, South Yorkshire Passenger Transport Executive and other authorities within Yorkshire and Humber to introduce a smartcard system for the region. Partnerships are also being considered with other regions and with bus and rail operators for national pilots and testing of the ITSO specification. A national smartcard pilot is currently being carried out in Bradford.

Specific proposals are shown in the following table.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1 – 2 YEARS</b>			
Review the range of multi operator and modal tickets prior to smartcard	To provide a good range of products to meet differing needs and avoid confusion	Working party to look at and implement initiatives such as zonal cards and other short term solutions and links with other neighbouring authorities	Metro and operators
Improved Metrocard renewal	To provide more flexible options	Direct debit and internet renewals	Metro
Emergency ticketing	Enable tickets (rail, bus etc) to be valid on other modes of transport in the event of emergencies	Develop with other partners	Metro and operators
Smartcard – phase 1	To provide a range of products to meet different needs	In partnership with operators and other regions	Metro and operators
<b>3 – 5 YEARS</b>			
Smartcard – phase 2	Develop home to school and cross boundary initiatives, and facilitate a greater range of multi operator ticketing and linkages with bus park and ride charging and discounts within travel plans	In partnership with operators and other regions	Metro and operators

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<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
<b>6+ YEARS</b>			
Integration of information and ticketing	To customise information to meet individual requirements including differing languages and catering for people with disabilities. To enable people to purchase tickets for travel and tourist venues etc.	In partnerships with operators, other companies in other areas	Metro, operators and other companies

## **NETWORK COVERAGE**

### **KEY ISSUES SPECIFIC TO NETWORK COVERAGE**

#### **Improving coverage and frequency of the core bus network by**

- Identifying core 'arrive and go' network and complementary services
- Addressing rural issues

### **NOW**

Buses are central to the overall transport objective of developing a high quality, integrated public transport system that provides an attractive alternative to the private car through accessing employment and training opportunities, meeting social needs and improving the economy of local town centres.

Commercial services account for 80% of bus mileage. Where possible the PTE encourages commercial operation. Subsidised services are provided where a need has been identified which meets the policies of the PTA. Approximately 65% of bus routes have at least some element of subsidy. This usually extends the period of service into early mornings, evenings and at weekends in order to maintain accessibility and improve the attractiveness of the commercial element of the service. Some routes are subsidised at other times, particularly in rural areas where the level of passenger demand cannot sustain commercial operation.

Long distance coach journeys are vital in providing links to the rest of the country and in most cases good links are provided between coach and bus travel.

Routes with a weekday and Saturday daytime 10 minute frequency or better provide a particularly convenient service to passengers. For many journeys this means that buses can be used on an 'arrive and go' basis, without need to consider the details of the timetable. The current daytime network of routes and corridors with such frequencies is shown in Figure 1. Significant restructuring of commercial services is currently taking place, moving towards more direct frequent services that are focused on the main urban centres. This often means that route variations that previously took services closer to particular residential areas and offered orbital links have been lost.

In the evening and on Sundays patronage levels mean that it is unrealistic to try to maintain such high frequencies.

There is a comprehensive daytime commercial network of bus services to many rural areas. However, this is not the case for the more isolated rural areas and there are generally more limited early morning, evening and Sunday services. This exacerbates problems of social exclusion and car dependency. In order to address this issue, Metro has established a Rural Bus team (other rural initiatives are mentioned in the Social Inclusion chapter) who review and develop the rural bus network in partnership with the local community. Current initiatives made through additional funding from the



Government's Rural Transport Initiative include:

- new service provision to fill service gaps in the current network;
- providing integrated transport links from rural areas to train services and other modes of transport;
- demand responsive routing, boarding and alighting points.

## **FUTURE**

Developments in the future will build on the good network coverage that already exists in many parts of West Yorkshire. However, there is a need to address the following issues:

- the frequent (10 minute or better) daytime service coverage should be extended to more areas, to provide a core, 'arrive and go' network;
- at least, a 30 minute service should be maintained on this network during evenings and on Sundays;
- there is a need to continue to provide services that run close to people's homes, particularly to provide mobility to elderly and disabled people;
- as far as is practicable, a network should be provided that provides a useable service to and from the variety of locations that people wish to reach at times when they wish to travel;
- avoiding frequent, short notice service changes that lead to uncertainty among the travelling public;
- investigating the use of 'non conventional' bus services in urban as well as rural area.

The strategy to develop the bus network and tackle these issues is set out in the accompanying table.

**STRATEGY**

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
<b>1 – 2 YEARS</b>			
Identifying and implementing the core 'arrive and go' and complementary networks that should be provided	To improve network coverage and operational procedures	Working party with operators	Metro / Operators
Agree limits on frequency of service changes	To improve service stability	Agreement with operators	Operators
<b>3 – 5 YEARS</b>			
Develop demand responsive services	To improve accessibility and convenience	Tender specification plus evaluation of commercial potential	Metro - tendered services. Operators - commercial services
Implementation of identified 'arrive and go' and complementary networks	To improve network coverage	A mix of commercial and tendered services	Metro / operators
<b>6+ YEARS</b>			
Further develop the network strategy	To improve overall network coverage	By identifying opportunities with partners	Metro and operators

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## **SCHOOL TRANSPORT**

### **KEY ISSUES SPECIFIC TO SCHOOLS TRANSPORT**

#### **Improving the reliability of services by**

- liaising with schools to better co-ordinate school start and finish times in order to maximise efficient use of school bus services
- working with parents to encourage bus usage in order to prevent en route and at-school congestion

#### **Improving the overall quality and image of all aspects of bus services by**

- working with operators on driving training
- using smartcards to improve ticketing and help modernise bus image

#### **Promoting and encouraging bus use from an early age by**

- including transport on the curriculum

#### **Addressing concerns regarding safety and security by**

- working in partnership with schools, LEAs and highways to assess sites at bus stops
- producing code of conduct leaflets
- participating in joint projects such as the DETR / Crime Concern initiative on improving staff / children relationships
- attempting to eliminate standing

### **NOW**

The proportion of journeys to and from school undertaken by car is increasingly of concern. These trips add significantly to the volume of peak car travel and reinforce expectations of a car-dependent lifestyle in future generations. LTP questionnaire research has identified that over 77% of residents feel that there are problems of congestion / parking around schools, but 39% of people interviewed continue to drive their children to school even though they admit that they could travel by bus<sup>1</sup>.

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<sup>1</sup> MVA focus group and household surveys

Reasons commonly cited<sup>2</sup> for not allowing children to use public transport are:

*'It's unsafe for children to travel on public transport' (this comment appears to relate to the journey to / at the stop and on bus rather than accidents)*

*'It's too expensive if there's a few children you're taking to and from school everyday'.*

In view of the above, the provision of bus-based school transport is an important facet of the overall strategy for reducing car use and peak hour congestion, encouraging greater use of public transport and improving environmental and safety standards. It is essential that children are targeted at an early age to encourage public transport use and positive attitudes. The development of a quality schools transport system is key element in the overall strategy.

In order to secure best value and plan trips effectively within an overall School Travel Strategy framework Metro has Agency Agreements with 4 of the 5 District Councils. Within the agreements Metro plans, organises and implements all schools transport and associated provision

A range of measures is provided by Metro and the LEAs in order to assist school travel. The general provisions are listed below, however all of the LEAs have slightly differing policies:

- criteria for free home to school travel up to pupil's 16<sup>th</sup> birthday;
- continued assistance for all 16+ pupils in Leeds with discretionary awards in other districts;
- free travel for pupils attending special schools until the age of 19 in accordance with Special Educational needs. Thereafter it needs need to be supported by the medical authorities or the Director of Education (funded by LEAs and Metro and in some cases Social Services);

In addition, the following discounts are available:

Half fare travel for all pupils until 18<sup>th</sup> birthday (if in full time education); monthly or weekly student MetroCard irrespective of age as long as the student is in full time education (discount funded by the operators), annual School Card for non statutory school travel until 19<sup>th</sup> birthday offering 15% discount, travel cards can be bought on an annual basis for use on contracted services where there is capacity.

There are over 44500 daily home to school journeys. To meet this demand the local bus network is supplemented by more than 450 services specifically provided for home to school travel needs. Most of the services are provided on a commercial basis therefore public funds are required to support only 250 services to meet LEA statutory requirements and PTA policies.

The close working relationship between Metro, the LEAs, schools and operators has helped established an effective schools transport system.

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<sup>2</sup> MVA focus group household surveys

## FUTURE

Metro and its partners recognise the need to develop schools transport in a way that provides a high quality, cost effective service that meets school and parental expectations. In order to achieve this, the following issues need addressing:

- the image of school buses among parents and students;
- impact of school children on other customers;
- overall quality of school transport service;
- attitudes among some school students that can lead to unruly behaviour and vandalism;
- lack of skills in handling school students amongst some bus drivers;
- integration of the provision of bus transport for travel to and from school within the development of broader school travel plans.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1 – 2 YEARS</b>			
Development of school travel initiatives and associated school bus travel plans	To reduce congestion at schools, increase journeys by public transport and improve child safety and health	As part of a working group to develop and implement school travel plans	District Councils, schools, Education Authorities and Metro  Parents also have some responsibilities
DETR / Crime Concern Project (starting with Leeds)	Lower the incidences of confrontation, antisocial behaviour, build driver confidence and improve perceptions	By using organisation best practice checklist, and educational sessions / training	Metro, operators (management and drivers), police, schools and parents
Safe site development	To improve safety at school bus stops	Visiting sites to identify problems and develop solutions	Schools / governing bodies LEAs, Highway Authorities, Metro and bus operators
Sixth formers / pupil on board assistance	To reduce incidences of bad behaviour on school buses	By establishing further trial schemes	Metro, schools and operators

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
Greater involvement of younger children	To promote travel on the curriculum	Established package of measures	District Road Safety officers and Metro
<b>3 – 5 YEARS</b>			
Transport on the curriculum	To raise health and safety awareness and influence future transport choice	By devising thought provoking topic material to be used in a variety of disciplines	District councils, schools, Metro, operators and LEAs Parents
Smartcard ticketing and incentives	To encourage pupils to use public transport by use of more effective ticketing with opportunities for cross marketing to give non-transport incentives such as travel, leisure and entertainment offers	Implementing initiatives in partnership with schools	Metro and operators
Eliminating standing	To improve perceptions of safety and comfort standards	By providing extra funding for increased service provision	Metro and operators
Improving service provision	To save costs by better scheduling and using money to enhance service quality	By liaising with LEAs and schools in scheduling the school day	Metro, schools, LEAs and operators and schools

## **BUS PRIORITIES**

### **KEY ISSUES SPECIFIC TO BUS PRIORITIES**

#### **Improving the reliability of services by**

- Implementing guided bus and other bus priority / clearway schemes and assisting in enforcement issues

#### **Improving the overall quality and image of all aspects of bus services by**

- Showing time savings by bus through priority schemes

### **NOW**

Bus movement can often be significantly improved by introducing measures aimed at reducing congestion and improving the overall flow of traffic. The West Yorkshire Local Transport Plan sets out the approach to developing a high quality bus network through the implementation of integrated measures on the main corridors. These measures include bus priorities such as:

- bus lanes (including 'with flow' and 'contra flow');
- bus gates;
- public transport routes into and around city / town centres having restricted access for general traffic (including pedestrianised and bus-only streets);
- bus priority at junctions including selective vehicle detection at traffic signals;
- guided bus ways;
- a pilot high occupancy vehicle lane;
- bus stop clearway orders at bus stops.

The provision of such facilities help to ensure that buses can operate efficiently and reliably. They provide priority to vehicles carrying many people above those carrying few people and help to improve the attractiveness of bus services in comparison with cars.

### **FUTURE**

Investigations are continuing into the feasibility of further priorities, including those whose potential have been identified by studies commissioned by major bus operators. A programme of schemes is set out in the Local transport Plan.

As part of this, there is a need to address the following issues:

- how to implement priorities that are more difficult to achieve, requiring significant

disbenefits to other traffic and/or land-take;

- the role of further high occupancy vehicle lanes;
- implementation of waiting restrictions / bus stop clearways and bus boarders (subject to other requirements such as cyclists, deliveries and access);
- improving the enforcement of traffic regulations giving priority to buses.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1-2 YEARS</b>			
Implement major guided bus schemes along Manchester Road, Bradford and complete east Leeds	To provide substantial priorities to buses	Funding approved by DETR plus operator contributions	Metro, District Councils and operators
Implement bus priorities programme starting with Kirkstall Road	To provide priorities to buses	Through LTP programme	District Councils and Metro
Establish and implement programme to implement bus stop clearways where appropriate	To enable buses to park close to and parallel to the kerb, thus assisting access for disabled people	Through LTP programme	District Councils
Camera enforcement and hypothecation of fines to reduce bus priority infringement	To improve the performance of bus priorities	Through LTP programme in discussion with police	Leeds District Council and WY Police
<b>3-5 YEARS</b>			
Implement bus priorities programme	To provide priorities to buses	Through LTP programme	District Councils and Metro
Implement bus stop clearways programme	To enable buses to park close to and parallel to the kerb, thus assisting access for disabled people	Through LTP programme	District Councils
'Decriminalise' enforcement of bus priorities, if powers are available	To improve enforcement	Cost of enforcement would be met from 'fines'	District Councils



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## **VEHICLES AND ON-BOARD STAFF**

### **KEY ISSUES SPECIFIC TO VEHICLES AND ON BOARD STAFF**

#### **Improving the reliability of services by**

- Improving vehicle maintenance standards

#### **Improving the overall quality and image of all aspects of bus services by**

- Continued driver training

#### **Addressing concerns regarding safety and security by**

- Introducing on-board initiatives and monitoring incidences of threatening behaviour

### **NOW**

The quality and accessibility of vehicles, the way they are driven and the attitude of on-board staff to passengers are all central to the quality and image of bus travel. In areas with high concentrations of buses, emissions from bus engines can have a major impact on air quality, especially with respect to the level of particulates in the atmosphere.

Currently, in West Yorkshire:

- 19% of the bus fleet consists of modern, low floor DDA compliant buses;
- major bus operators use low sulphur fuel in compliance with Euro 3 emission standards, significantly reducing particulate emissions;
- most drivers have undertaken customer care training to NVQ or equivalent standard and additional driving skills training.

### **FUTURE**

There is a need to ensure that vehicle design is compatible with current infrastructure design and likewise for infrastructure to be designed to cater for future vehicle types.

Being able to offer advice on interchange issues and offer fares and ticketing information should be considered an important part of driver training. Consideration should be given together with the upgrading of ticketing and communications equipment to providing on-board access to a wider range of timetable and fare information than is currently available.

Further measures to improve the quality of the fleet and improve customer care are set out in the accompanying table and are detailed in the Quality Partnership framework.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	RESPONSIBILITIES
<b>1-2 YEARS</b>			
DDA training	To improve customer care for all customers with differing needs	Partnership with DETR schemes and operators	Operators
Potential of increasing amount of low floor vehicles	To provide higher levels of accessibility than DDA requirements	Working party	Operators
Consideration of accessible bus route pilots	To enable people with mobility impairments to access public transport	Working party	Operators
<b>3-5 YEARS</b>			
Consideration of automatic ramps	To prevent drivers having to leave cabs, and improve customer care	Working party	Operators
Improving on-board access to network information	To increase the range of information available on-vehicle to assist travel	Working party	Operators

## **SAFETY AND SECURITY**

### ***KEY ISSUES SPECIFIC TO SAFETY AND SECURITY ARE***

#### ***Addressing concerns regarding safety and security by***

- Devising a comprehensive public transport safety strategy

#### **NOW**

According to market research a significant amount of people have concerns for their personal safety; in relation to transport these concerns are greater walking to and from the bus stop and waiting for the bus rather than on-bus. As a result of research and customer feedback, the District Councils, Metro and other partners are striving to make the whole journey as safe and comfortable as possible in the following ways:

- The design and provision of facilities such as bus shelters with lighting and good visibility
- Providing security / customer care staff on duty at larger bus and rail stations;
- Providing monitored CCTV coverage at all Metro bus stations and on-street provision by the District Councils;
- Improved street lighting;
- Participation in Community Safety Partnerships established under the Crime and Disorder Act to identify concerns and develop targeted solutions by joint action within partnerships.

#### **FUTURE**

A public transport safety strategy is being developed to address the needs of the general public and driver security. Metro's participation in the Community Safety Partnerships should form the basis for the strategy work.

The strategy will address the following issues:

- The differing needs of women, people with impaired mobility and people affected by attitudinal or racial prejudice especially in non-daylight hours. Metro has already been involved in developing DETR's gender audit which will be used as a key tool;
- Alleviating security concerns through CCTV balanced with staff presence. Limited resources prevent widespread staffing of stations but key areas could be targeted for additional resources through consultation.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1 – 2 YEARS</b>			
Safety strategy	To cover all aspects of safety taking account of social exclusion	By consultation with local communities, police and local authorities	Metro and District Councils
Take account of DETR's women and public transport checklist	To take account of best practice in the design of new and improved facilities	By identifying areas of deficiency by using checklist	Metro, District Councils and operators
Passenger assistance on targeted services	To help lessen number of safety related incidents to benefit drivers and passengers	By identifying key routes through consultation between drivers, the public and Metro	Operators
<b>3 – 5 YEARS</b>			
Safety audit on all main corridors	To minimise vulnerability when waiting for buses	By enlisting the help of women and vulnerable users' groups in checking facilities	Metro and District Councils

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## **INTERCHANGE**

**Key issues specific to interchange are**

**Providing an appropriate level of information at key locations by**

- Providing timetable information for all services at key interchange points
- Clear direction information to make changing services as simple as possible

**Improving coverage and frequency of the core bus network by**

- tendering or encouraging operators to provide linking services to key bus interchanges, railway stations and light rail stops (future).

**Providing a broad range of competitively priced multi-operator, multi-modal tickets**

- (measures covered in ticketing section)

### **NOW**

Easy interchange is essential if people are to make full use of the public transport network. We wish to reduce barriers to interchange caused by the following actual or perceived difficulties:

- Poorly connecting services;
- Difficulties in obtaining or understanding information about connecting services;
- Uncertainty about the reliability of connecting (particularly less frequent) services;
- High costs caused by the need to buy separate tickets for each journey stage;
- Concerns about safety and the quality of the environment at stops and stations;
- Lack of or unclear information about where to catch connecting services at interchange points;
- The availability and security of facilities for parking cars, motorcycles or bicycles;

We are working on a number of initiatives to provide better interchange opportunities such as:

- Tendering or encouraging operators to route specific bus journeys to tie in with rail services;
- Providing in partnership with rail operators on screen rail information at Leeds Bus Station;
- Assisting better bus / rail interchange in an ongoing programme of improvement works;

- Ensuring good linkages between bus and heavy / light rail:
- Identifying bus park and ride opportunities

Other initiatives are identified under the other separate headings within this document.

There are already good links between long distance coach journeys and bus travel at Bradford Interchange, Halifax, Huddersfield and Wakefield Bus Stations. In addition Leeds Bus Station is adjacent to the National Express Coach station and there is good liaison between bus and coach station staff. Opportunities for better interchange are looked at on an ongoing basis.

## **FUTURE**

Future work will consist of developing the above and other initiatives as part of the following overall strategy:

- Examining service patterns in partnership with the operators and promoting specific connecting services, within the framework set by the Transport Act;
- Improving the quality and availability of information, and considering promoting a network of frequent services;
- Tackling lack of reliability through quality partnerships and service monitoring;
- Developing the availability of single journey through ticketing on all services;
- Improving bus and rail stations, developing bus / rail and bus interchanges at the busiest on-street locations, determining appropriate standards of passenger shelters for each location, providing information and attractive and secure waiting facilities at key locations, addressing personal safety through a comprehensive strategy;
- Seeking cost effective opportunities to expand provision of park and ride at rail stations and developing the role of bus based park and ride;
- Providing secure cycle lockers at bus and rail stations, working with the train operators for cycles to be able to be carried free of charge on as many services as possible and considering the potential for carrying cycles on buses;
- Assessing viability of including car sharing schemes as part of interchange initiatives;
- Providing bus information at rail stations.

Other proposals have been set out in the various tables earlier in the document.

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## **SOCIAL INCLUSION**

This chapter is a brief summary of transport related issues, a more comprehensive strategy is included with the full LTP submission.

### **Now**

Social exclusion from mainstream opportunities is a result from a number of factors such as poor skills, unemployment, high crime, family breakdown, poor health and low incomes. Although these differing components are complex and need tackling as a package, this chapter highlights initiatives related to public transport. In general, socially excluded groups are more dependent on public transport as they do not have access to a car.

Transport is increasingly being seen as an important component of comprehensive strategies to tackle social exclusion. In many cases, these strategies make use of EU / SRB funding. In addition, more attention is being given to the links between areas of high unemployment and development sites. Therefore, packages including job opportunities, training, health facilities, shops, leisure and community facilities and public transport access need to be put in place if the benefits of economic growth are to be more widely shared.

Through partnership working, Metro and the district councils are devising a social inclusion strategy. Our overall aim is to reduce public transport barriers so that communities can reach employment and training opportunities through suggestions for public transport improvements from community involvement.

### **Accessibility**

Metro and the Councils are trying to achieve:

**'Accessible services within accessible developments and accessible transport infrastructure'** (DPTAC, Jane Wilmot)

In order to achieve this, there are a number of ongoing initiatives and measures such as:

- AccessBus – a door-to-door service that is booked in advance and is available free of charge every day of the week to anyone who is unable to use conventional transport;
- Social Services transport provision;
- Ongoing programme of upgrading infrastructure and facilities such as providing bus boarders to ensure that maximum advantage can be taken of new accessible vehicles and the Disabled Persons Transport Advisory Committee (DPTAC) recommendations are taken into account;

- 
- Accessibility Checklist - for use by councils and others to include all aspects of bus infrastructure, information, fares and ticketing and staff training ;
  - Ongoing assessment of attitudinal and physical barriers - at Metro establishments;
  - Providing concessionary fares for eligible groups (detailed below) and prepaid ticketing opportunities for students (Student MetroCard) and unemployed people (MetroRover) – funded on a commercial basis by the operators;
  - Tackling concerns regarding personal security (detailed in Safety and Security chapter)
  - Improving rural transport options (see Rural section in this chapter);
  - By working with the operators to meet the DDA target ahead of schedule (currently 19% of the fleet in West Yorkshire depots is accessible).

### **Concessionary Fares**

The West Yorkshire Scheme provides more comprehensive travel opportunities for elderly people than those set out in the Transport Act. The scheme also gives concessionary travel to disabled, blind and young people.

Approximately 40% of bus journeys within West Yorkshire are made under the WYPTA Concessionary Travel Scheme. Operator reimbursement is both a major area of expenditure for Metro and a significant source of income for operators, helping to sustain services for the benefit of all passengers in West Yorkshire.

### **Community and Rural Transport**

Metro's rural policy is covered within the network coverage chapter, however Metro are monitoring new rural services provided through the Government's Rural Bus Grant and Rural Bus Challenge Competition funding. This will primarily be achieved by consulting bus users and assessing the impact upon the community in terms of providing unmet travel needs or reducing car dependency. Based upon this information services will be modified and adapted to better serve the community, identify potential for future development and amend and refine policies.

Innovative rural initiatives include:

- providing parcels, prescriptions and message services;
- providing public transport information at a variety of outlets (village shops, surgeries, public houses, community forums etc)



- wheelchair accessibility and DDA trained drivers

Whilst not all of these initiatives are specific to social inclusion policies, they obviously have significant benefits for those most in need of assistance.

In addition strategies are being considered to take account of the broader transport picture by better integrating “conventional” bus services with taxis, car sharing schemes, community buses, school buses, health vehicles, cycles, voluntary transport and other innovative travel resources

In relation to community transport, Metro’s policy is to consider comprehensive schemes that will achieve LTP objectives and offer financial support rather than wholly fund. Metro and the District Councils support a number of initiatives such as:

- Nightlink - a door to door service for women in Leeds
- taxi voucher scheme – linked to shopmobility scheme in Kirklees

Rural Transport Development Officers have been appointed in Kirklees and Calderdale as part of three year projects with funding from the Rural Transport Partnership Fund administered by the Countryside Agency. The overarching aim is to identify community needs and help set up community transport plans with 75% funding from the project. Constant liaison with local bus companies and Metro to ensure that services are integrated with other mainstream services is central to this project. The role of Metro and the Councils will be further determined following the results of the cross cutting Best Value Review.

### **Social Services Transport Provision**

The current main areas of transport provision serve:

- People with learning difficulties to day centres
- Disabled children in need to respite care and educational establishments (the latter is usually provided by the Education Department)
- Physically disabled adults to day centres (for people under the age of 65 this is usually organised by the day centres out of the budget allocated to them by social services)
- Meals on Wheels – meal provision for elderly people in their own homes who do not need round the clock care
- Children in need, this includes transport to maintain contact with families and to schools, supervised contact and other social and leisure purposes (the local authority assumes shared parental responsibility with regards to foster parents and prospective adopters)
- People requiring respite care

In most cases there is an aspiration to ‘normalise’ ie using ordinary transport rather than segregating transport needs and using taxis.

It is intended that a working group will be established (including representation from both Children's and Adults' Services) in order to provide more joined up strategies following Best Value Reviews.

## FUTURE

The Best Value Review and other Local Authority modernisation strategies will ensure that current performance, effectiveness and future needs will be assessed. It is also anticipated that developer contributions from planning obligations will contribute towards accessible transport, shopping trips, community transport and taxi voucher schemes.

It is envisaged that the proposals detailed in the tables may take some time to fully implement as reviews are currently underway in the public sector and span a number of years.

## STRATEGY

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

WHAT	WHY	HOW	PARTNERS
<b>1 – 2 YEARS</b>			
Reduce transport barriers	To identify problems of access to work and training opportunities	Ongoing consultation with targeted communities and negotiation with developers	Metro and Planning Authorities
Social Inclusion Strategy	To improve access to work via job centre web links	Consultation with councils, community groups and other partners and job centres	Working Party
Attitudinal barriers and equal rights awareness	To identify areas of training need in order to provide quality customer service to all customers	Ongoing consultation with disability groups. driver training (MIDAS) to include first aid, lifting and handling, disability awareness. similar training for other front line providers	Working Party
Voluntary and community transport review	To improve transport choice by low cost community based methods	To review current initiatives and assist in the preparation of start up plans	Kirklees and Calderdale Metro and other District Councils to assess opportunities elsewhere
Integration – phase 1	To establish current areas of differing transport provision and decide on best practice	Liaison with Social Services Shopmobility, Accessbus and social services provision	Working Party

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WHAT	WHY	HOW	PARTNERS
<b>3 – 5 YEARS</b>			
Integration – phase 2	To assist convenient journeys for people with disabilities / looked after children, families and children in need	To implement some of the working group policies	Metro, Social Services and Education Authorities

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## **LAND USE PLANNING**

Most land use related issues are addressed in the Land Use strategy submitted with the Local Transport Plan.

### **NOW**

The locations of housing, employment, shopping and other land uses can influence the demand for travel, the ease with which efficient public transport services can be provided and the likelihood that people will use public transport to meet their travel needs. The planning system can influence the location of development and can ensure that developers contribute to the provision of public transport facilities.

In order to encourage sustainable transport use, national Planning Policy Guidance notes, PPG13 and PPG3 both place emphasis on linking proposed development with public transport access. Previously, accessibility and sustainability were not given the priority now being afforded. As a result there are a number of out of town centres and small pockets of development with no real transport choice, other than the car.

Metro, the District Councils and local bus and rail operators have established a number of criteria for planning application consultation in order to try to ensure that developments are either sited in areas that offer sustainable transport choice or in areas that could benefit from developer contributions towards achieving sustainable transport. Metro involves the bus operators within the planning application process in order to ensure that developers design for bus usage and provide other enhancements to the bus journey in order to attract commercial operations.

A number of developer contributions under section 106 of the Town and Country Planning Act 1990 and section 278 of the Highways Act 1980 have already contributed towards public transport improvements throughout the county. Developers are beginning to be required to develop travel plans as a condition for development to be permitted. Leeds City Council have a policy to secure developer contributions to the proposed Supertram, (or other high capacity public transport provision) through supplementary planning guidance.

### **Draft Regional Planning Guidance**

The draft Regional Planning Guidance, 'Advancing Together: Towards A Spatial Strategy', including the draft Regional Transport Strategy, was published in October 1999. The guidance envisages that, as far as possible, development that is needed will be concentrated in upgraded urban areas, near good public transport and in market towns and larger villages. This will allow more travel needs to be met by public transport, walking and cycling, and hence reduce congestion on the roads.

The draft guidance continues the current strategy for West Yorkshire by maintaining the emphasis on the existing towns and cities as the main areas for development and the strategic role of the green belt. The guidance, however gives greater emphasis to the re-use of previously used land.

The guidance also advises that where development needs cannot be met within existing urban areas there may be the potential for linking new and existing provision of housing, employment and transport in 'development corridors'. These corridors should start within the urban area and have spare or potential public transport capacity, especially rail. The guidance expects that established city, town and local centres will remain the main focus of retailing and leisure activities and population related services such as health care should be well served by public transport.

The spatial strategy aims to achieve a reduction in the reliance on cars and the provision of improved public transport.

## **FUTURE**

There is a need to ensure that:

- revisions to District Unitary Development Plans fully reflect national and regional planning guidance with respect to access by bus;
- new developments are accessible by bus services;
- the development control system secures appropriate provision of bus facilities and, where appropriate, contributions to bus services;
- realistic travel plans with firm targets for bus use are developed for new developments.

The criteria on accessibility to public transport to be published by the Government in 2001 should provide the basis for many future proposals.

## **STRATEGY**

Most of the proposals in years 1-2 will be further developed / introduced on a more widespread basis in future years.

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
<b>1 – 2 YEARS</b>			
Guidelines on transport enhancements	To define bus service levels appropriate to scale of development and suggest type of public transport enhancements needed for each land use in order to achieve more sustainable transport choice	By holding a conference with councils, consultants, retail and residential developers and others	Metro and Planning Authorities

<b>WHAT</b>	<b>WHY</b>	<b>HOW</b>	<b>PARTNERS</b>
Accessibility mapping database	To enable Metro, as a consultee to assess sustainability and enable Planning Authorities to assess sustainable locations to guide allocating land for development and determining planning applications	To take full advantage of GIS mapping and bespoke systems	Metro and Planning Authorities
UDP reviews	To assist in transport strategy and identify sustainable sites	Partnership working	Planning Authorities and Metro
RPG and RTS reviews	To make sure that transport choice is high on the agenda and helps serve economic growth and communities	By active involvement in strategy making	Planning Authorities and Metro
<b>3 – 5 YEARS</b>			
Set up transport improvement funds in each district	To enable multi developers of multi sites to contribute towards transport enhancements along corridors	By liaising with Planning Authorities in setting up funds as planning obligations in the vein of Supertram funding	Planning Authorities

## **PARTNERSHIP**

The Bus Strategy is based upon partnership as the key delivery mechanism. The common objective of encouraging greater use of public transport in order to reduce problems associated with traffic congestion is central to partnership working.

### **NOW**

A systematic approach to the formation of Quality Partnerships between the local authorities, the bus operators and the police has been developed. These partnerships are intended to ensure that the various elements of the bus strategy set out in previous sections are implemented in a coordinated fashion. Partnership would explore opportunities to coordinate investment programmes, implement complementary measures / initiatives and adopt best practice. A broad statement of principles was agreed at a West Yorkshire level, followed by more detailed agreements within each of the five Districts.

We have shown how partnerships can provide improved services and facilities, most notably through the groundbreaking A61 Scott Hall Road Guided Bus scheme and the proposed East Leeds Quality Bus Initiative, the latter benefiting from significant partnership contributions. A number of other corridor improvement schemes giving priority to buses have been implemented across West Yorkshire, with the first formal agreement being signed for the Wakefield Road and Manchester Road corridors in Huddersfield.

### **FUTURE**

A framework for the development of Quality Partnership corridors has been developed and is included as Appendix 3. It recognises that there is a range of corridor types in West Yorkshire and the types of action appropriate for one corridor may not be appropriate for another. In recognition of this, it is proposed that corridors for a quality partnership approach are classified as follows, with increasing commitment expected from each of the partners.

**Standard** - significant bus flows but few congestion problems; no priority measures proposed but other infrastructure and service improvements required. (eg Keighley Road, Halifax)

**Priority**- significant bus flows and some congestion problems, bus priority and other infrastructure and service improvements proposed (eg Lockwood Road, Huddersfield, Manningham Lane, Bradford)

**Prestige**- important corridors, extensive bus priority measures and wide range of other improvements proposed (eg York Road, Leeds and Manchester Road, Bradford).

The Transport Bill will provide the opportunity for these partnerships to be established on a statutory basis.

## STANDARDS

STANDARD	TARGET	RESPONSIBILITY
Punctuality	At least 95% of services to run no more than 6 minutes late.  No services to run early	Operators and District Councils (bus priorities)  Operators
Reliability	No more than 0.5% of services to be cancelled	Operators
Driver training	100%	Operators
Revising information at bus stops/shelters	Subject to Best Value Review	Metro / Operators
Cleaning of shelters	Subject to Best Value Review)	Metro
Revise current standard of replacing broken glazing	Subject to Best Value Review	Metro
Offensive graffiti removed	100% within 24 hours of being reported	Metro
Company Travel Plans	100 within LTP period	Councils and Metro
School Travel Plans	75 within LTP period	Councils and Metro
Accessible bus corridors	2 per year	Councils and Operators
Bus Priority measures	4 per year	Councils and Operators
Quality Partnership Schemes	2 per year	All partners

## INDICATORS

The following Government Best Value Transport Indicators will be reviewed on annual basis:

Indicator	Definition
Cost per passenger journey of subsidised bus services	Local authority and PTA expenditure on local bus services as defined by Transport Act 1985. Does not include concessionary fares
Local bus services (vehicle kilometres per year)	The total annual distance operated by all local buses within the area of the authority
Percentage of users satisfied with local provision of public transport information	Percentage stating that they are very or fairly satisfied with the provision of public transport information overall
Percentage of users satisfied with local bus services	Percentage stating that they are very or fairly satisfied with the local bus service overall



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 Passenger Transport Executive Group Indicators:

<b>Indicator</b>	<b>Definition</b>
Total cost per concessionary trip	Total scheme cost divided by total number of concessionary trips
Concessionary trips per passholder	Total concessionary trips divided by total passholders for period of analysis

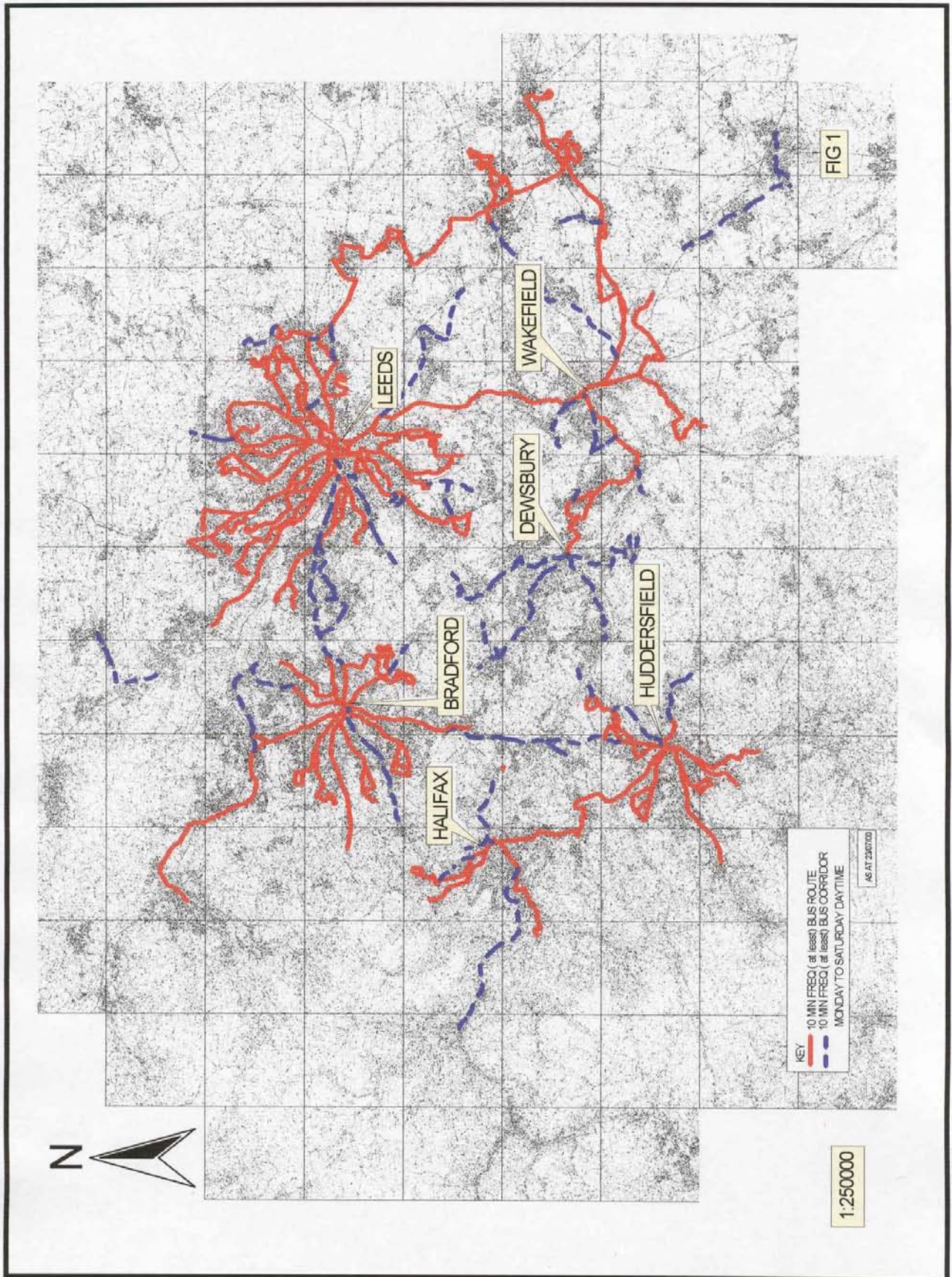
## TARGETS

	<b><i>Target by 2006</i></b>
Patronage growth	3%*

\* if Supertram were to be implemented within this timescale

## MONITORING

A monitoring system will establish whether these targets achieve the quota of patronage growth, if not then measures will be revised.



**APPENDIX 1**

**INFORMATION AND PROMOTION**

To ensure that anybody wishing to travel in West Yorkshire is easily able to obtain reliable information on all public transport services in the county.

To encourage the use of public transport by promoting its use in partnership with others, particularly emphasising its role as an environmentally friendly alternative to the car.

**STATIONS, STOPS AND SHELTERS**

To continue to improve facilities for passengers by adopting high standards of design and amenity in bus and railway stations and improving the quality of the waiting environment at roadside shelters and stops.

To co-ordinate the development of a public transport system that provides, as closely as possible, “seamless journeys” for passengers by facilitating interchange between services and between modes.

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

**TICKETING**

To promote and develop a comprehensive prepaid ticket system with operators, through joint investment, which facilitates an integrated approach to public transport use.

To co-ordinate the development of a public transport system that provides, as closely as possible, “seamless journeys” for passengers by facilitating interchange between services and between modes.

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

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## NETWORK COVERAGE AND SCHOOL TRANSPORT

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

## BUS PRIORITIES

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

## VEHICLES AND ON BOARD STAFF

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

## SAFETY AND SECURITY

To continue to improve personal safety and security for the users of public transport.

## INTERCHANGE

To co-ordinate the development of a public transport system that provides, as closely as possible, “seamless journeys” for passengers by facilitating interchange between services and between modes.

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

## SOCIAL INCLUSION

To co-ordinate the development of an accessible and affordable public transport system which caters for the needs of people with limited alternative means of travel, in particular, disabled people, elderly people, people on low incomes, school children and those living in rural areas.

To maintain the concessionary travel scheme to assist those with limited financial resources because of age or disability to meet their personal travel needs.

## PARTNERSHIP

To continue the development of an integrated public transport system for the people of West Yorkshire, taking account of social, technological, environmental and legislative changes and requirements.

To ensure, in partnership with operators, highway authorities and others that bus services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from car.

**APPENDIX 2****BEST VALUE: FIVE YEAR SERVICE REVIEW SCHEDULE**

<b>Year 0</b> <i>1999/2000</i>	<b>Year 1</b> <i>2000/2001</i>	<b>Year 2</b> <i>2001/2002</i>	<b>Year 3</b> <i>2002/2003</i>	<b>Year 4</b> <i>2003/2004</i>	<b>Year 5</b> <i>2004/2005</i>
DSO	Concessionary Travel	Subsidised Services (Bus)	AccessBus	Service Monitoring - Surveys	Concessionary Travel
Passenger Information	Passenger Facilities	Education Transport	Planning Development	Purchasing	Metroline
	Travelwise	Promotion	Rural Bus	Central Finance (part)	
	Support Services (part)	IT	Support services (part)		Support Services (part)
		Central Finance (part)	Legal		
			Travel Centres		

Different aspects of both Project and Rail services will be reviewed throughout the 5 year period

**APPENDIX 3****COMPONENTS OF QUALITY PARTNERSHIPS**

There is a range of corridor types in West Yorkshire and the types of action appropriate for one corridor may not be appropriate for another. In recognition of this it is proposed that corridors for a quality partnership approach can be classified as:

**Standard** - significant bus flows but few congestion problems; no priority measures proposed but other infrastructure and service improvements required (eg Keighley Road, Halifax)

**Priority**- significant bus flows and some congestion problems; bus priority and other infrastructure and service improvements proposed (eg Lockwood Road, Huddersfield, Manningham Lane, Bradford)

**Prestige**- important corridors, extensive bus priority measures and wide range of other improvements proposed (eg A61 Scott Hall Road).

The potential components of corridor partnership agreements are set out below.

**STANDARD CORRIDOR QUALITY PARTNERSHIP: POTENTIAL COMPONENTS**

<b>Feature</b>	<b>Responsibilities</b>			
	<b>District Council</b>	<b>Operator</b>	<b>Metro</b>	<b>Police</b>
Project development and management				
New/upgraded shelters, with seating and lighting				
Accessibility features at bus stops				
Prioritised provision of timetable information				
Prioritised maintenance/cleaning of bus shelters				
Improved bus access in centres				
More rigorous parking controls in centres				
Improvement to bus stops/bus station in centres				
Driver training (customer care/disability training)				
Use of 'cleaner' fuel (eg. low sulphur diesel)				
Deployment of route dedicated vehicles				
Deployment of route dedicated staff				
Improved 'presentation' of vehicles				
Complaints redress mechanism				
Promotion				
Quality Partnership 'branding'				
Attractive service levels, including off-peak times				
Enforcement of TROs				
Monitoring				

**PRIORITY CORRIDOR QUALITY PARTNERSHIP: POTENTIAL COMPONENTS**

<b>Feature</b>	<b>Responsibilities</b>			
	<b>District Council</b>	<b>Operators</b>	<b>Metro</b>	<b>Police</b>
Project development and management				
Market Research/Passenger Surveys				
New/upgraded shelters, with seating and lighting				
Accessibility features at bus stops				
Prioritised provision of timetable information				
Prioritised maintenance/cleaning of bus shelters				
Extensive Bus priority measures				
Selective Vehicle Detection to give buses priority at signals				
Fitting of transponders				
Bus priority as part of UTC systems				
Improved bus access in centres				
More rigorous parking controls in centres				
Improvement to bus stops/bus station in centres				
Driver training (customer care/disability training)				
Use of 'cleaner' fuel (eg low sulphur diesel)				
Modern, comfortable vehicles to DIPTAC specification				
Deployment of route dedicated vehicles				
Deployment of route dedicated staff				
Improved 'presentation' of vehicles				
Complaints redress mechanism				
Promotion – initial				
Quality Partnership 'branding'				
Ongoing Promotion, Communication with Passengers				
Improved service levels				
Co-ordination of timetables				
Attractive service levels, including off-peak times				
Enforcement of TROs				
Monitoring				
Park and Ride				



**'PRESTIGE' CORRIDOR QUALITY PARTNERSHIP: POTENTIAL COMPONENTS**

<b>Feature</b>	<b>Responsibilities</b>			
	<b>District Council</b>	<b>Operators</b>	<b>Metro</b>	<b>Police</b>
Project development and management				
Market Research/Passenger Surveys				
Establishment of User Groups				
New/upgraded shelters, with seating and lighting				
Accessibility features at bus stops				
Real time information				
Prioritised provision of timetable information				
Prioritised maintenance/cleaning of bus shelters				
Bus priority measures (possibly guideways)				
Selective Vehicle Detection to give buses priority at signals				
Fitting of transponders (and possibly guidewheels)				
Improved bus access in centres				
More rigorous parking controls in centres				
Improvement to bus stops/bus station in centres				
Driver training (customer care/disability training)				
Use of 'cleaner' fuel (eg low sulphur diesel)				
New, low floor vehicles				
Use of alternative fuels				
Co-ordination of timetables				
Review of service patterns				
Deployment of route dedicated vehicles				
Deployment of route dedicated staff				
Improved 'presentation' of vehicles				
Complaints redress mechanism				
Promotion – initial				
Quality Partnership 'branding'				
Ongoing Promotion, Communication with Passengers				
Improved service levels				
Attractive service levels, including off-peak times				
Enforcement of TROs				
Monitoring				
Park and Ride				

# RailPlan 5

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**Appendix A**  
**Appendix B**

**POTENTIAL NEW STATION SITES**  
**STATION DEVELOPMENT STRATEGY**

# 1. Introduction

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## Background

- 1.1 RailPlan 5 has been produced by Metro (West Yorkshire Passenger Transport Executive) and forms part of the West Yorkshire Local Transport Plan (LTP) covering the period 2001/2002 to 2005/2006.
- 1.2 RailPlan 5 sets out aspirations for the future development of the rail network serving West Yorkshire over the twenty year period from 2000 to 2020. The Plan covers network wide issues (such as reliability and access for disabled people) as well as the development of services and infrastructure on a line-by-line basis. The Plan aspirations are broken down into three time periods
  - ◆ short-term: - improvements that are a high priority and can be secured within the 5 year period of the Local Transport Plan;
  - ◆ medium term: - improvements which will need more time to develop but could be secured within a 6 - 10 year period;
  - ◆ longer term: - aspirations for further development in the 11- 20 year period. Many of these aspirations will be subject to feasibility and other studies.
- 1.3 RailPlan 5 is a statement of the West Yorkshire Passenger Transport Authority (WYPTA) input to the shadow Strategic Rail Authority (sSRA) in respect of the re-franchising of local, TransPennine, Cross-Country and East Coast Main Line rail services. It also contains aspirations in respect of the future development of Channel Tunnel rail services.
- 1.4 RailPlan 5 has been produced in the context of Railtrack's Leeds 1<sup>st</sup> scheme to enhance facilities and provide additional track capacity at Leeds. It sets out priorities for utilising some of the extra capacity and is therefore to be considered alongside the aspirations of the train operators and potential train operators.
- 1.5 RailPlan 5 is a statement of Metro and the PTA's requirements for Railtrack to take into account in its planning process and in particular in the 2001 Network Management Statement.
- 1.6 RailPlan 5 is also forms an input to spatial planning in West Yorkshire. By setting out clear proposals for the development of the local rail network it will influence and inform the formulation of land-use plans that direct new development to transport nodes and encourage more sustainable travel patterns.

## Structure of the Plan

- 1.7 The Plan is structured so that aspirations are set out in an integrated way on a line by line basis. Common issues, such as performance targets, are identified as applying to the whole of the local rail network.

## Consultation

- 1.8 Consultation took place during the development of the draft RailPlan in parallel with the consultation on the first, five year Local Transport Plan. This extended from consultation at public meetings to meetings with local Rail User Groups, rail industry partners and relevant local authorities.
- 1.9 The key message from initial consultation was the customers' desire for:
- ◆ A reliable and dependable service;
  - ◆ Clean and reliable trains;
  - ◆ Adequate seating capacity on trains;
  - ◆ Reliable and up to date information on train running;
  - ◆ Clean and safe rail stations and car parks with adequate facilities;
  - ◆ New initiatives in terms of services and frequencies.
- 1.10 The draft RailPlan document was presented to the local rail user groups, Railtrack, Train Operators, the Passenger Transport Authority's Passenger Consultative Committees and all of the relevant, neighbouring local authorities. All of the consultees were invited to comment on the draft document and their responses have been taken into account within the relevant sections of the final document.

## 2. National, Regional and Local Context

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### The National Context

- 2.1 The National Policy Context is set by the Government's Integrated Transport White Paper, the associated daughter documents, the reform of the Regional Planning Guidance system and the Transport Bill published in December 1999.
- 2.2 The White Paper recognised that PTAs/PTEs should continue to play a key role in the planning of public transport services in metropolitan areas. The White Paper also proposed the establishment of a Strategic Rail Authority in order to provide a clear, coherent and strategic national programme for the future rail development.
- 2.3 The White Paper also proposed:
- ◆ the introduction of Local Transport Plans as a key delivery mechanism for integrated transport;
  - ◆ Rail Passenger Partnership funds as a means of encouraging and supporting innovative proposals that develop rail use and promote modal shift.
- 2.4 The establishment of the Strategic Rail Authority is one of the key proposals contained within the Transport Bill currently before Parliament. In the meantime, the sSRA has started the process of inviting proposals for re-franchising the rail network. Their objective is to secure the earliest possible delivery of better railway services for passengers while providing demonstrable value for money for the taxpayer. It is envisaged that this objective will be achieved on the basis of long-term replacement franchises that will seek to:
- ◆ Commit to a continuous improvement in safety
  - ◆ Deliver improvements in the quality of service to passengers
  - ◆ Ensure expansion of network capacity and high levels of investment
  - ◆ Treat franchisees and train operating companies as full partners, alongside Railtrack and rolling stock lessors, sharing the risks and rewards that the industry offers
  - ◆ Encourage train operating companies to build brands, develop markets and provide innovative customer service initiatives
  - ◆ Structure and manage efficiently the risks involved in major investment projects
  - ◆ Involve train operators co-investing with other industry parties and in sharing the risks.
- 2.5 The first round of franchise replacement involves three operating areas including the East Coast Main Line (service presently operated by GNER). The second round includes the sSRA's proposal for a new Trans-Pennine Express franchise based on removing this element from the current Northern Spirit franchise. The remainder of the Northern Spirit franchise is to be merged into a new 'Northern' franchise also covering parts of the North West.

### Regional Planning Guidance

- 2.6 Draft Regional Planning Guidance (RPG), prepared by the Regional Assembly for Yorkshire and the Humber, was published and submitted to the Secretary of State in October 1999. The draft RPG contains the draft Regional Transport Strategy which places emphasis on the development of rail services and infrastructure as part of an integrated approach to strategic transport issues across the region. Cross boundary initiatives including developing ticketing structures that remove artificial barriers to travel will make a key contribution to the regional strategy.

### **West Yorkshire Local Transport Plan**

- 2.7 The LTP sets out a strategy based upon the four key themes of:
- ◆ improving the quality of alternatives to the car;
  - ◆ managing the condition and use of the highway network;
  - ◆ managing the demand for travel;
  - ◆ promoting social inclusion.
- 2.8 Improvements to the quality of rail services and expansion of the rail network are an integral part of the Local Transport Plan strategy.
- 2.9 The Plan proposes that a variety of funding sources be utilised to achieve improvement to the rail network, with some funding from Local Transport Plan being available to complement investment by Railtrack and train operating companies. In addition, it is assumed that Rail Passenger Partnership funding will be sought, in accordance with DETR guidance, for major rail projects for which there is not a commercial case to justify implementation by the private sector.

**The West Yorkshire Local Transport Plan sets out the overall primary transport objectives shown below:**

**Economic**

- to provide opportunities for fostering a strong, competitive economy and sustainable economic growth;
- to improve operational efficiency within the transport system;
- to maintain the transport infrastructure to standards to allow safe and efficient movement of people and goods.

**Social**

- to improve safety, security and health, in particular to reduce the number and severity of road casualties;
- to promote social inclusion and equal opportunities for access to transport.

**Environmental**

- to improve environmental quality and reduce the impacts of transport on air quality and noise;
- to contribute to national and international efforts to reduce the contribution of transport to overall greenhouse gas emissions.

2.10 The Local Transport Plan also includes **subsidiary objectives** that are proposed. These are not considered to be ends in themselves but are important in achieving the primary objectives. These subsidiary objectives are:

- ◆ to reduce the general rate of growth in road traffic and, where feasible, to reduce absolute traffic levels;
- ◆ to encourage a greater proportion of journeys to be made by public transport, cycling and walking as alternative modes to the private car;
- ◆ to encourage more use of rail and waterways as alternatives to lorries;
- ◆ to improve integration between transport modes, between the various policy areas and the strategies of different relevant organisations.

### **Rail Services in West Yorkshire**

2.11 Rail services in West Yorkshire are currently provided by five train operators:

- ◆ Northern Spirit;
- ◆ First North Western;
- ◆ GNER;
- ◆ Virgin Trains;
- ◆ Midland MainLine.

2.12 Local services are provided on behalf of the Passenger Transport Authority and Metro by Northern Spirit and First North Western. These services are branded as the MetroTrain network which includes a distinctive rolling stock livery, station branding and minimum service specification.

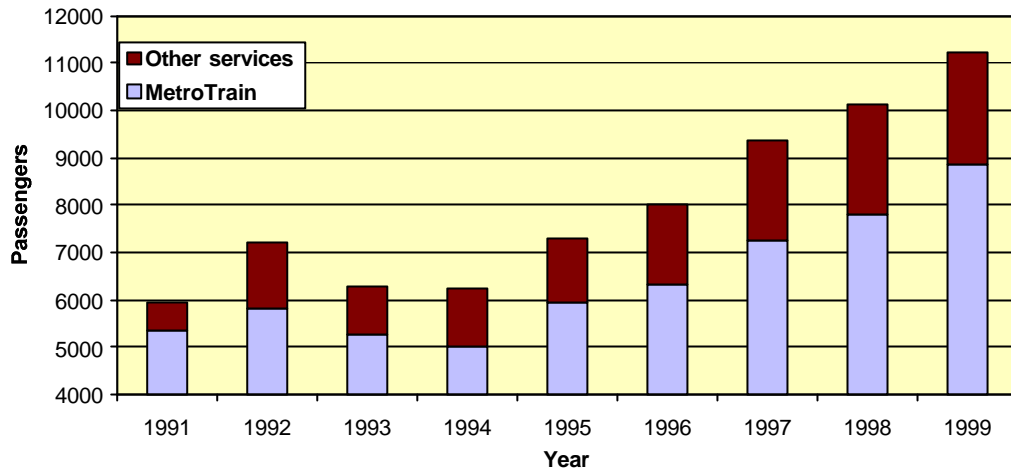
2.13 Although the train operators are responsible for the day-to-day delivery of the train service, there are other key rail industry bodies that have a role in planning, delivery and monitoring of rail services:

- ◆ The sSRA;
- ◆ The Rail Regulator;
- ◆ Railtrack;
- ◆ Rolling stock leasing companies;
- ◆ The Rail Passenger's Committee/Council.

2.14 Patronage on MetroTrain services has grown rapidly recently such that there are now about 16 million passenger journeys per year. This represents a doubling of passengers over the last 10 years.

2.15 Figure 2.1 shows how morning peak passenger arrivals on local train services at Leeds have increased since 1991. The classification of MetroTrain and other services has changed over the period represented by the graph. The figures for 1993 and 1994 were affected by industrial action and electrification works.

**Figure 2.1 Morning Peak Passenger Arrivals at Leeds (07.30 - 09.00)**



2.16 The growth in peak passengers on PTE supported services has been approximately 40 per cent since the start of the franchise in 1997. As more and more passengers have been attracted to the network, providing sufficient capacity at peak times has become a major issue. This has been addressed, in part, through a successful Rail Passenger Partnership (RPP) by Metro which will see 21 additional vehicles introduced to West Yorkshire.



### 3. Policies, Objectives and Targets

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#### PTA Policies

3.1 The over-arching PTA policy relating to the development of the rail network is set out below:

**To ensure, in partnership with operators, Railtrack and others, that rail services are as effective as possible in meeting the travel needs of the people of West Yorkshire, serving both existing passengers and attracting additional patronage, including mode switch from the car.**

In order to achieve this, the PTA and Metro will:

- ◆ Monitor franchise performance ensuring contractual commitments are delivered and enforced.
- ◆ Seek to secure funding for additional rolling stock as an urgent priority to meet immediate and forecasted passenger demand and allow the introduction of new services.
- ◆ Reduce overcrowding by ensuring Passengers in excess of capacity (PIXC) standards in franchise agreements are met.
- ◆ Promote expansion of the rail network through the opening of new stations which contribute to overall transport objectives. Priorities will be based upon forecast patronage and revenue (which will offset capital costs)
- ◆ Develop greater integration with other modes including Park and Ride provision where land is available in order to encourage interchange and greater transfer from the car.
- ◆ Promote the use of cycles by providing secure storage facilities at local rail stations and working with train operators to facilitate the carriage of cycles on as many trains as possible.
- ◆ Improve station facilities in partnership with the rail industry with particular emphasis on accessibility, security and information provision to ensure that station facilities best meet the needs of all users.
- ◆ Promote investments in new train and track where necessary to reduce overcrowding and allow the introduction of new services.
- ◆ Seek to ensure that fares are offered which continue to represent good value for money.
- ◆ Co-operate with SYPTE and GMPTE and other relevant local authorities and rail operators on services that cross West Yorkshire boundaries.
- ◆ Oppose any closures and reductions in services for both local and long distance services which would adversely affect West Yorkshire passengers.
- ◆ Work with the sSRA to achieve further improvements to the local rail network when franchise are re-let.

#### Objectives

3.2 The objectives of the RailPlan relate to the LTP and Metro's developing Forward Vision for public transport in West Yorkshire.

**Metro's 20 year vision for public transport:**

**To secure, in partnership with others, the development of high quality integrated public transport which is:**

- Easy to understand and to use
- Accessible to all;
- Attractive;
- Reliable;
- Affordable;
- Efficient;
- Safe and secure.

3.3 Examples of links between the Vision statement and RailPlan aspirations are shown in the table below.

<b>Objective</b>	<b>Description</b>	<b>Examples of RailPlan aspirations</b>
V1	<b>Easy to understand and easy to use</b>	MetroTrain branding Real time information More frequent services Public Address at stations Use of the internet Improving interchange Additional stations Clockface departure times
V2	<b>Accessible to all</b>	Stations fully accessible New trains compliant with DDA regulations Improved information formats New stations located to serve demand Additional station car parking (including spaces for disabled badge holders)
V3	<b>Attractive</b>	Adequate capacity Higher quality rolling stock Improved station facilities Higher standards of maintenance and repair Retention of MetroCards and concessionary fares
V4	<b>Reliable</b>	Tougher standards for reliability and punctuality More robust train plans

<b>Objective</b>	<b>Description</b>	<b>Examples of RailPlan aspirations</b>
V5	<b>Affordable</b>	Wider range of pre-paid tickets Cross-boundary tickets Removal of interchange penalties
V6	<b>Efficient</b>	New stations on existing lines Feeder bus services Increase off peak travel Skip stop services Cross-Leeds services Link to land use planning
V7	<b>Safe and Secure</b>	CCTV at stations and car parks Increased staffing Quick repairs of vandalism

### **Targets and Milestones**

- 3.4 It should be possible to deliver a significant proportion of the short term aspirations in the Plan through the franchise replacement process. A review of achievements will be undertaken once the process is complete for both the Trans Pennine and Northern franchises.
- 3.5 Key milestones for the first two years of the Plan are:
- ◆ First phase of new stations programme implemented and second phase commenced;
  - ◆ A commitment to new rolling stock for use on MetroTrain services;
  - ◆ A step change in performance;
  - ◆ A fully developed bus-rail integration plan;
  - ◆ A jointly agreed (and resourced) station development plan.
- 3.6 Annual assessments of progress against LTP targets will be made as part of the LTP review process.

## 4. Network Issues

### Introduction

4.1 This section contains aspirations for network wide enhancements that would apply across all MetroTrain services and stations. It also contains aspirations for service developments across the network. More detailed proposals are contained in the route development plans in section 6.

### Performance

**A reliable and punctual service with enough capacity to meet peak demand is essential to the success of the rail network. A step change in performance is a prerequisite to all the aspirations in the RailPlan.**

4.2 Since the present franchises began, performance has been patchy and in particular the number of peak trains operating with less than the planned number of carriages has been consistently too high. This is completely unacceptable and must be addressed as an absolute priority.

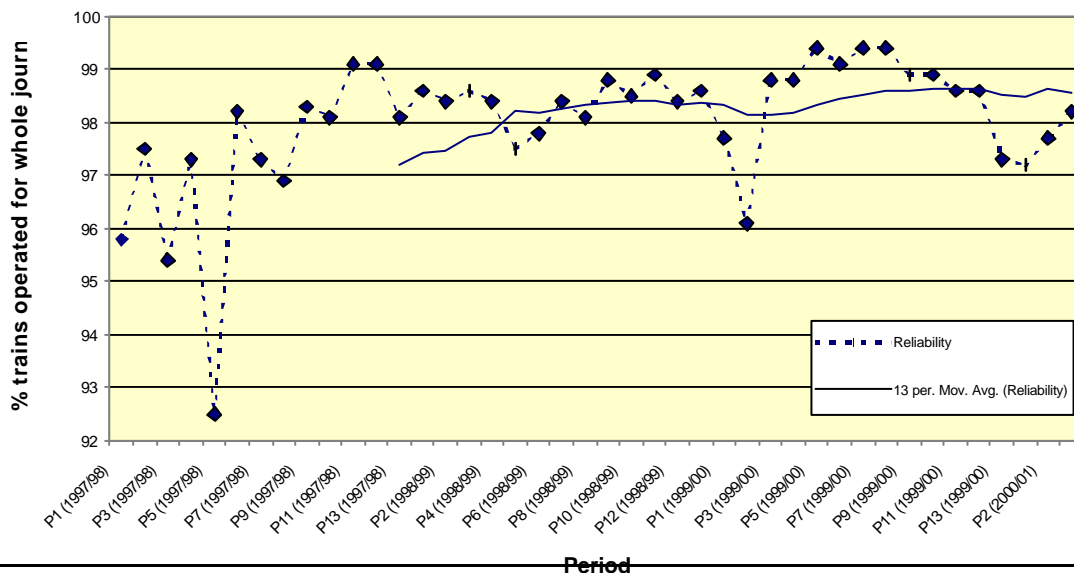
4.3 Rail performance is measured in three main ways:

- ◆ Reliability (which indicates the proportion of trains cancelled)
- ◆ Punctuality (which indicates the proportion of trains on-time)
- ◆ Strengthenings (which indicates the proportion of peak hour trains with the correct number of carriages)

#### Reliability

4.4 Figure 4.1 shows how reliability across the MetroTrain network has varied since the franchises began in 1997. This is based on Metro's own measure of reliability where a train is counted as 'cancelled' if it fails to operate for any part of its journey. It can be seen that there was a sharp drop in reliability immediately after the franchise began. This was mainly due to staffing problems at Northern Spirit, but since then reliability has generally been improving (as indicated by the moving average), but there have still been periods of high cancellation rates.

**Figure 4.1 MetroTrain Reliability**

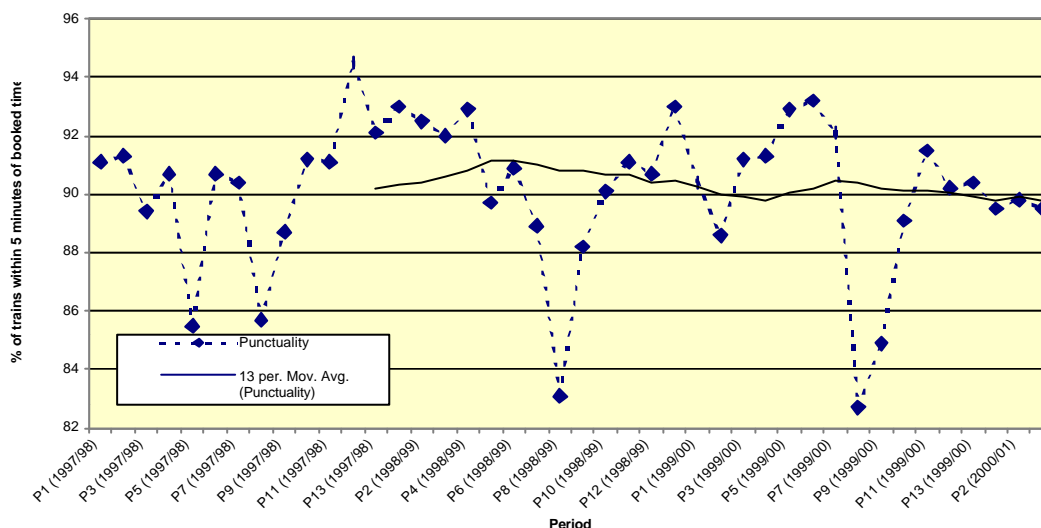


- 4.5 At present, there are several measures of reliability in use by the industry. It is important that passengers have a consistent, understandable measure of reliability. The sSRA has developed a new measure of performance called the Public Performance Measure (PPM). This measures the number of trains cancelled as those that are operated for less than 50% of the total journey. Trains that operate for 50% or more of the journey are added to the punctuality measure.
- 4.6 It is proposed to adopt the PPM as the main figure to be reported and also as one of the Best Value Performance Indicators for rail. An initial target of 99.5% reliability is proposed and this may mean that extra contingencies of staff and vehicles are required to deliver the step change.

### Punctuality

- 4.7 Figure 4.2 shows punctuality since the start of the franchises. It can be seen that punctuality has generally been in the band 88% to 92%, but there have been some significantly poorer periods (corresponding to the Autumn leaf-fall season) and the moving average shows no evidence of any long run improvement. Measures such as replacement of the Class 308 fleet and the completion of the Leeds 1<sup>st</sup> scheme should assist with raising punctuality.

**Figure 4.2 MetroTrain Punctuality**



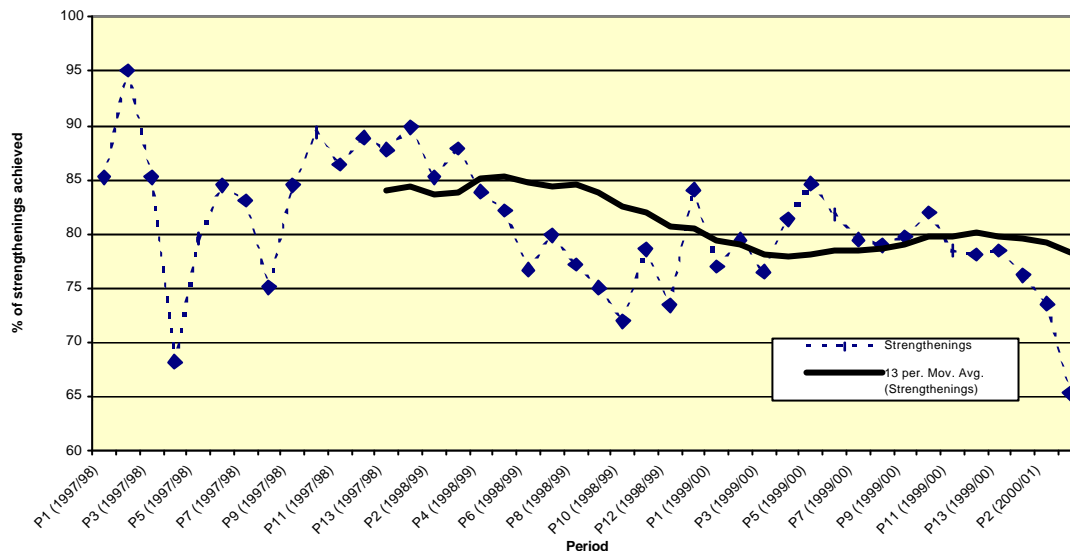
- 4.8 The PPM for punctuality measures the proportion of trains arriving within 5 minutes of booked time (for short distance services) and it is proposed to adopt this as the headline punctuality figure and one of the Best Value Performance Indicators. An initial target of 92% of all trains to arrive within 5 minutes of booked time is suggested with further increases during the life of the franchise.

### Strengthenings

- 4.9 Metro carefully plans peak trains to ensure that as far as possible the seating capacity matches demand. As the amount of rolling stock available for MetroTrain services has been fixed for the first three years of the franchise, it has not been possible to guarantee everyone a seat a peak times, nevertheless the service is planned so that the busiest services have the greatest capacity.

4.10 Each train that is required to operate with more than the standard two carriage formation (i.e. three or more carriages) is referred to as a peak ‘strengthening’. Northern Spirit’s performance on delivering these strengthenings is then monitored on a daily basis. Figure 4.3 shows the proportion of peak strengthenings achieved in West Yorkshire since 1997.

**Figure 4.3 MetroTrain Strengthenings**



4.11 It can be seen that the proportion of strengthenings achieved has recently been about 80%. This means that one in five trains planned as a ‘strengthening’ is operating with less than the booked number of carriages. In many cases, passenger numbers are such that they are simply unable to board the trains and are left waiting for the next service. In other cases, passengers are forced to stand in extremely cramped and uncomfortable conditions. A one in five failure rate means that a passenger who regularly travels on a strengthened train can expect to be faced with fewer than the planned number of carriages on average twice a week.

4.12 This level of failure is completely unacceptable and a step change is required. The target should be 100% of strengthenings achieved on a daily basis. This may mean that train operators will have to re-evaluate their rolling stock requirements and ensure that they have a sufficient level of spares to deliver the capacity allowing for reasonable contingencies. It may also mean a move towards a more uniform rolling stock fleet is required.

4.13 Train operators receive financial penalties and incentives when performance is below and above benchmarks set in the Franchise Agreement. The sSRA has recognised that the current level of these penalties is not sufficient to encourage the operators to improve performance and proposed increases in both penalties and incentives are supported. In particular, the annual penalty for short forming or cancelling a train should exceed the annual cost of leasing the rolling stock concerned.

4.14 It is accepted that on a complex rail network things do occasionally go wrong. Sometimes the causes are outside the control of the rail industry (such as severe bad weather or vandalism). When things go wrong, passengers should be entitled to accurate information and to know that the train operators will assist them with their journey and in some circumstances provide compensation for the inconvenience.

- 4.15 Train companies should set minimum standards for provision of information, assistance and compensation to passengers when things go wrong. The standards should apply to passengers travelling on pre-paid tickets such as MetroCards and concessionary fares.

## **Integration**

- 4.16 Better integration is required in order to more effectively deliver national and local transport strategies. Key aspects are:
- ◆ Integration between rail services;
  - ◆ Development and enhancement of physical interchanges;
  - ◆ Integration with bus services;
  - ◆ Integration with other modes;
  - ◆ Integration of ticketing systems.

### Integration between rail services

- 4.17 Integration between rail services primarily means improving connections between local services and long distance services. This is particularly important if the shape of the rail franchises changes (for example if TransPennine is operated as a separate franchise). It is also about ensuring that adequate facilities are available at key interchange stations and ensuring that adequate contingencies are in place to deal with problems.
- 4.18 A key way of improving interchange between rail services is to enhance the frequency of local rail services to ensure that there is always a wide choice of connections available. At times of day when the frequency is lower, connections should be planned so as to minimise waiting time for the majority of passengers. The MetroTrain network will continue to be planned so as to maximise interchange possibilities wherever possible. In West Yorkshire, Leeds is the major interchange point between local and long distance services. Railtrack's Leeds 1<sup>st</sup> scheme will go a long way towards enhancing Leeds as an interchange point. In particular the installation of a new footbridge with escalators and passenger operated lifts will make interchange much easier.

### Physical Interchanges

- 4.19 Leeds is and will continue to be the major interchange point at the hub of the MetroTrain network, but other stations such as Huddersfield and Wakefield Westgate should be developed as major interchange points between local, regional, Intercity and bus services. Proposals already exist to upgrade Wakefield Westgate and it is important this scheme is progressed and that Metro is fully involved in the development.

### Integration with bus services

- 4.20 A key LTP strategy is to enhance integration between bus and rail journeys in order to make interchange between modes as seamless as possible. Several dedicated bus links have been introduced recently including:
- ◆ Otley to Menston Station;
  - ◆ Denby Dale to Wakefield Westgate.

- 4.21 It is proposed that further dedicated bus links are pursued where there is demand, but there will be many cases where the provision of a dedicated bus link will not be cost effective, but improvements to the existing links between bus and rail services could offer significant benefits. Examples include:
- ◆ Provision of bus information at all rail stations (must be accurate and up to date);
  - ◆ Minor diversions of existing bus routes to better serve rail stations;
  - ◆ Minor alterations to bus and rail timetables to enhance connections;
  - ◆ Improvements to pedestrian routes (including signing) between bus stops and rail stations;
  - ◆ Introduction of through ticketing.
- 4.22 In order to facilitate the above, an audit of existing bus services passing close to rail stations will be undertaken to highlight opportunities to enhance integration. Opportunities for links with rural bus services will also be considered.
- 4.23 Infrastructure enhancements will also be required at some locations in order to enhance bus-rail integration. An enhanced bus interchange facility is already proposed for New Station Street in Leeds.

#### Integration with other modes

- 4.24 More needs to be done to encourage passengers to arrive at stations on foot, by bicycle or by public transport. In particular, cycling could be encouraged by ensuring that all stations have secure cycle storage facilities (monitored by CCTV) and that all new rolling stock has sufficient storage space to carry cycles with the minimum of restrictions.
- 4.25 It is recognised that many passengers will still wish to arrive at stations by car and it is particularly important to encourage car drivers to take the train rather than driving for the whole journey. Therefore Park and Ride facilities will continue to be developed. There are two main types of Park and Ride scheme:
- ◆ Promotion and extension of existing station car parks in order to extend the local catchment of the station;
  - ◆ Development of more strategic Park and Ride sites (possibly involving new stations) aimed at relieving particular congestion points.
- 4.26 The following strategy is proposed:
- ◆ Continued expansion of station car park facilities where demand justifies it and land is available;
  - ◆ Improvements to security at car parks (more centrally monitored CCTV systems). Consideration should also be given to the provision of security staff at some of the larger or more vulnerable sites;
  - ◆ Developments of mini interchanges with enhanced Park and Ride and links to bus services, initially at Cross Gates and Micklefield;
  - ◆ In conjunction with others (such as the Highways Agency) examine the potential for strategic Park and Ride sites serving the M1/M62 (in the East Ardsley area) and the M62 (in the Brighouse/Elland/Mirfield area)

#### Ticketing



- 4.27 The MetroCard family of tickets provide the foundations for integrated ticketing in West Yorkshire. MetroCards have proved extremely popular with commuters and helped to drive the continued growth in patronage. They do not, however, cater for all markets and in particular the infrequent traveller. This is an area that the train operators will be expected to develop further in partnership with Metro and the bus operators.
- 4.28 Metro, together with South Yorkshire Passenger Transport Executive and other partners, is developing proposals to use smartcards for ticketing and concessionary travel on public transport services. Metro is a leader of the national ITSO (Integrated Transport Smartcard Organisation) developing a standard specification for inter-operable smartcards for public transport use and has already discussed with Northern Spirit and ATOC (the Association of Train Operating Companies) preliminary ideas for a smartcard trial in West Yorkshire. A key advantage of smartcards is the ability offer products such as the stored value tickets and electronic purse, which better meet the needs of frequent but irregular travellers.

## Rolling Stock

**Sufficient rolling stock to satisfy current and future demand is essential to the RailPlan. MetroTrain services are presently operated by a mixture of rolling stock, much of which is quite old and unsuitable for commuter journeys. Replacement of the diesel rolling stock with a new high quality design of train is an essential part of raising the quality of rail travel.**

- 4.29 At present, most MetroTrain services are operated by a mixture of Pacer and Sprinter type diesel units most of which fall short of the quality passengers expect. Electric services on Airedale and Wharfedale routes are operated by very old Class 308 units which will be replaced from the end of 2000 by new Class 333 units procured to Metro's specification. Newer electric units also operate Leeds-Doncaster services.
- 4.30 Some rolling stock operated in West Yorkshire was originally purchased by Metro and is now leased directly to Northern Spirit. This and other stock used on MetroTrain services is painted in the distinctive MetroTrain livery. It is important that Metro retains a distinctive image and the livery should be used to signify a minimum standard of service that passengers can expect.
- 4.31 The Class 333 units will set new standards in terms of quality on local rail services. They fully meet the requirements of the DDA Regulations and have been designed with passenger comfort in mind. Consideration should be given to procuring additional Class 333 vehicles for the following purposes:
- ◆ 8 additional centre cars to make the whole fleet 4 car;
  - ◆ Additional units to allow a higher frequency peak service on Airedale/Wharfedale routes;
  - ◆ Possible use on the Leeds-Doncaster line to create a standard electric fleet;
  - ◆ Further units for any routes that may be electrified in the future (such as Leeds to York).
- 4.32 New diesel rolling stock should be procured as a high priority for use on non-electrified lines.

### **New MetroTrain rolling stock should:**

- ◆ Fully meet the requirements of the Disability Discrimination Act;
- ◆ Have adequate well-positioned doors to facilitate quick boarding and alighting ;

- ◆ Have seating that is individually moulded;
- ◆ Have surfaces that are bright and easy to clean;
- ◆ Include automatic in-vehicle Public Address;
- ◆ Include internal and external information displays;
- ◆ Have cycle storage facilities (4 per train);
- ◆ Be painted in the current MetroTrain livery;
- ◆ Be compatible with requirements for cross-boundary services into South Yorkshire /Greater Manchester and other areas not covered by PTEs;
- ◆ Meet the highest standards of safety and security.

4.33 In order to ensure that there is enough capacity to meet growing peak demand, it is important that in the future, the number of vehicles available to operate on MetroTrain services is linked to passenger growth and the service is planned on an annual basis so as to meet relevant overcrowding targets. On many routes, platform extensions will be necessary to accommodate longer trains. A line of route strategy for extending platforms (including those outside West Yorkshire) will be developed with Railtrack and the train operators.

4.34 Once rolling stock is in service it is important that a high quality is maintained and that standards are set for maintenance and cleaning. These should cover:

- ◆ Appropriate light and heavy maintenance;
- ◆ Daily internal cleaning of vehicles;
- ◆ Periodic heavy clean;
- ◆ Regular external cleaning;
- ◆ Periodic external repainting.

### Service Development

**The existing level of service should be retained as a minimum, but there is also the potential for new services and higher frequency service to be developed to improve key regional links and make existing services more attractive.**

4.35 The current network has developed over a period of time into a relatively stable service pattern with good levels of frequency on most routes. Further service development has in some cases been constrained by the lack of spare capacity, primarily at Leeds. This will be alleviated by the completion of Railtrack's Leeds 1<sup>st</sup> scheme at the end of 2001 and will allow an expansion of services.

4.36 The Plan seeks to increase service provision in order to develop the rail network as an alternative to the car. Priorities for service enhancement will be linked to LTP objectives on the grounds of passenger demand, feasibility and operating costs. Higher frequencies and later services are also desirable in the evenings. Most last trains presently commence their journeys at about 11.00pm. With the advent of more liberal licensing laws and the promotion of Leeds and other areas as 24 hour cities, later services are more appropriate. Aspirations for future service improvements include:

- ◆ Half hourly daytime service on all routes (wherever possible);
- ◆ Core network of 15 minute frequency services;

- ◆ Daytime frequency to extend until 21.00;
- ◆ Last services around midnight;
- ◆ Night services between major centres;
- ◆ Higher frequencies on Sundays (at least hourly);
- ◆ More clockface service intervals.

- 4.37 Operating later trains and additional services on Sundays will have implications for track and infrastructure maintenance and the industry will need to develop innovative responses to changing demands.
- 4.38 Detailed aspirations for each route are included in the Route Development Plans, but high priorities for enhancements are:
- ◆ Half hourly service Leeds-Castleford-Knottingley (via proposed new station at Glasshoughton);
  - ◆ Extension of Pontefract-Wakefield service through to Leeds;
  - ◆ Half hourly service to Marsden and Slaithwaite;
  - ◆ Half hourly service between Halifax and Huddersfield via Brighouse;
  - ◆ Half hourly local service on the Huddersfield Line throughout the day.
- 4.39 In many cases, peak services are already more frequent than off-peak services and increasing the frequency further will in some cases attract new patronage as well as providing additional capacity. Key priorities for an enhanced peak service include:
- ◆ Wakefield to Leeds (morning peak);
  - ◆ Airedale and Wharfedale Line services;
  - ◆ York and Selby Line services.
- 4.40 At present most MetroTrain services call at all stations. As services expand (and particularly if new stations are opened) there is a strong argument to move away from all trains calling at all stations and introduce some limited stop services or ‘skip stop’ (trains serving alternative stations) services. In devising new service patterns, maintenance of existing levels of frequency and journey opportunities should be a priority. There may, however, be some stations where demand cannot justify the existing level of service and this will have to be considered in the context of maximising the overall passenger benefit.
- 4.41 There is also scope for introducing some additional and enhanced services to improve key regional links as the first stage in developing a network of semi-fast services. Key priorities for enhanced regional links include:
- ◆ Leeds to Sheffield (high priority);
  - ◆ Bradford to Manchester;
  - ◆ Barnsley to Leeds;
  - ◆ Leeds to Manchester Victoria via Brighouse;
  - ◆ Bradford to Wakefield with a possible extension to Sheffield.

## Network Development

**Building on the success of the MetroTrain network and the new stations that were opened in the 1980s and early 1990s, a new programme of station openings will be pursued. In the future there may be the scope for a limited number of new fixed links possibly utilising light rail technology.**

4.42 The PTA has prioritised 5 new station sites for implementation by 2002. These are:

- ◆ Kirkstall (on the Airedale and Wharfedale Lines);
- ◆ Apperley Bridge (on the Airedale Line);
- ◆ Low Moor (on the Caldervale Line);
- ◆ Horsforth Woodside (on the Harrogate Line);
- ◆ Glasshoughton (on the Pontefract Line).

4.43 In 1999 consultants undertook a study of more than 30 potential station sites in West Yorkshire which have previously been suggested as having potential or have been identified in local development plans. In addition to the five selected for early implementation it is proposed to bring forward further new stations during the period of the RailPlan having regard to the likely costs and benefits that each site will bring. The sites that would provide the greatest benefits and require the least subsidy will be prioritised for earlier implementation. In the short term, a further 6 sites will be prioritised for early implementation. The full list of sites is shown in Appendix A

4.44 In terms of new routes, it is proposed that the following key ‘themes’ are progressed and brought forward for implementation, if a suitable business case can be made, in the longer term.

- ◆ A fixed link to Leeds/Bradford Airport;
- ◆ Links to areas not presently served by existing rail lines or proposed SuperTram routes;
- ◆ Utilising presently disused railway alignments;
- ◆ Integration of heavy rail with light rail and conversion of heavy rail routes.

4.45 In many cases, the provision of a heavy rail link will be prohibitively expensive even in the long term, but technology is advancing such that within the period of the RailPlan shared heavy rail and light rail running will be possible as will the operation of tram/train hybrid type vehicles which could reduce the cost of such schemes considerably. It is proposed to undertake further work on the potential for such schemes with a view to drawing up a priority list of schemes for implementation in the medium to long term.

4.46 A study is currently being undertaken of the potential for a fixed link to Leeds-Bradford Airport. The capital cost of a heavy rail link (for example from the Harrogate Line at Horsforth) is considerable and it is likely that a business case could only be made when passenger numbers using the Airport reaches a critical threshold. The proposed strategy is therefore:

- ◆ Continue to work with the Airport and other authorities on assessing the potential for a fixed link;

- ◆ Improve existing bus links between Leeds station and the Airport;
  - ◆ Develop a dedicated bus link from Apperley Bridge;
  - ◆ Consider a further bus link from both Horsforth and Guiseley stations;
  - ◆ Make provision for a future fixed link in terms of rail network capacity.
- 4.47 There are several towns in West Yorkshire (such as Otley) which do not have a fixed rail link presently, but could possibly support the provision of such a link in the future. There are also expanding communities such as Allerton Bywater that are located close to disused railway alignments with further potential for Park and Ride traffic. Studies have previously been undertaken of the potential to re-open the old railway route to Scholes and the Spen Valley Line between Dewsbury and Bradford. All routes have potential problems such as necessary deviations from the existing route, but may become more feasible with a tram/train hybrid type scheme.
- 4.48 In the long term, it may also be feasible to convert some existing heavy rail routes to light rail operation or integrate light rail operation with the existing heavy rail services. It is proposed to commence feasibility studies with Railtrack in Autumn 2000.

### **Access for Disabled People**

**The rail industry is expected to deliver compliance with the Disability Discrimination Act and make the rail network accessible to a wider range of the community.**

- 4.49 Metro has worked with Railtrack and the train operators to improve accessibility at key stations (for example the upgrading and installation of lifts respectively at Halifax and Dewsbury). The Leeds 1<sup>st</sup> scheme (which includes the installation of passenger operated lifts and escalators) will provide a major enhancement to the accessibility of the MetroTrain network through its role as a key interchange point.
- 4.50 Railtrack has suggested to the Rail Regulator that a sum of £720m is required to make the national network fully accessible and that this cost should be recovered through track access charges. The Regulator's response will be crucial in determining the method of implementing the required improvements.
- 4.51 Metro will continue to consider making contributions to accessibility schemes where additional benefits can be demonstrated or the works can be brought forward in time. It is recognised that some form of prioritisation of works will be required and Metro will work with the industry to develop a strategy for West Yorkshire.

### **Safety and Security**

- 4.52 Crime and more particularly the fear of crime can be a major deterrent to using the railway especially amongst the more vulnerable groups in society. Crime at station car parks is also a major deterrent to many car drivers using park and ride facilities. The provision of high quality CCTV cameras at a number of West Yorkshire stations has assisted in reducing the incidence of crime, but CCTV alone cannot completely alleviate the fear of crime. One way of achieving this is by increasing the staff presence at railway stations.
- 4.53 Train operators will be expected to develop a safety and security strategy which should include the following elements:

- ◆ A programme to ensure that all stations and car parks are covered by centrally monitored CCTV system in the medium term;
- ◆ Provision of help and information points at all stations linked to a CCTV control room (Metro has developed its own CCTV network and control centre initially for bus stations in West Yorkshire);
- ◆ Increased staff presence linked to development of new ticket offices;
- ◆ Commitment to achieving the government's 'Secure Stations' status at all stations in the medium term.

## Passenger Facilities and Information

4.54 The quality of the waiting environment makes a major contribution to the overall journey experience. Metro has been very successful in developing partnership schemes to enhance station facilities in conjunction with Railtrack and the train operators. Best practice at these locations should be applied across the network and passengers should know what facilities to expect at each type of station.

4.55 It is reasonable that passengers can expect a common set of standards to apply at all stations. A minimum standard needs to be determined for the small unstaffed stations. At medium and major stations it is reasonable to expect a wider range of facilities to be available.

4.56 The aspiration for all stations is:

- ◆ Stations branded as per Metro specification;
- ◆ High quality waiting shelters adequate for the number of passengers expected at the busiest times;
- ◆ Public Address system (capable of making station specific announcements);
- ◆ Real time information system including a clock display (at least one screen per platform and a departure summary in the main entrance);
- ◆ Ticket machine;
- ◆ A telephone on each platform;
- ◆ A help point on each platform (unstaffed stations);
- ◆ Seating for at least 20% of passengers at the busiest time;
- ◆ High quality lighting to all public areas including car parks and station approaches;
- ◆ CCTV (centrally monitored) covering all public areas;
- ◆ Covered cycle parking (monitored by CCTV);
- ◆ Up to date timetable information;
- ◆ Local area map including bus and taxi information.

4.57 Over time, it is expected that more stations will have a ticket office which will also assist with passenger safety and security. The following targets are proposed in order to prioritise the provision of additional ticket offices:

- ◆ All stations with more than 1000 boardings per day;
- ◆ Stations with more than 500 boardings a day that formerly had a ticket office or have a building that can be easily converted into a ticket office.

4.58 Development of pre-trip and in-trip information is a key priority for Metro . Operators will be expected to play a role in the development of MetroLine (telephone information service), internet databases and other developing technologies.

## 5. Implementation Strategy

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- 5.1 The proposals set out in Section 4 range from service quality performance to major capital investment in new infrastructure. RailPlan 5 recognises the need for a strategy to secure the achievement of the Plan proposals which brings together funding from Railtrack, train operating companies and other sources, including Rail Passenger Partnership and Local Transport Plan.
- 5.2 Some costs associated with RailPlan 5 can be quantified. Other costs cannot be estimated with any certainty until feasibility work has been undertaken.
- 5.3 Indicative capital costs of RailPlan 5 short -term proposals are set out below. At this stage, the costs shown are broad estimates only.

	<b>Indicative Unit Cost</b>	<b>Short Term Cost-£ m</b>
New stations	£ 1.0m / station	5.0
Rail park and ride extensions	£ 200k / car park	1.6
Passenger Facilities	£ 50k / station	1.5
Passenger Information	£ 20k / station	0.6
Pedestrian Access Routes	£ 20k / station	0.2
Bus/rail interchange	£ 2.0m / interchange	2.0
CCTV coverage	£ 60k / station	3.5
Platform lengthening	£ 1500 per metre	2.0
Rolling stock	£ 1.0m / vehicle	50
<b>TOTAL</b>		<b>66.4</b>
Access Improvements	n/a	to be quantified

- 5.4 It should be possible to achieve many of the short term aspirations through the franchise replacement process and opportunities will be discussed with the sSRA. A more detailed implementation plan will be worked up with the train operators and other partners following the proposed review of initial milestones.
- 5.5 It is proposed to commence work immediately on those proposals where Metro is the lead organisation.
- 5.6 The overall approach to implementation is set out below:



<b>Attribute</b>	<b>Responsibility for implementation</b>	<b>Implementation Method</b>
Interchange and Integration	Metro SRA District Councils	Franchising Partnership working
Service Performance	Train Operating Companies	Franchising Franchise monitoring and incentive regimes
Rolling Stock	Train Operating Companies	Franchising Franchise Reviews Rail Passenger Partnership
Service Development	Metro Train Operating Companies	Franchising Franchise Reviews Rail Passenger Partnership
Network Development including new stations	Railtrack Metro Train Operating Companies	Railtrack Network Management Statements Franchising Franchise Reviews Rail Passenger Partnership
Access for Disabled People	Railtrack Train Operating Companies District Councils	Railtrack's Accessibility Strategy Possible partnership funding with Metro and Train Operating Companies in order to secure early benefits
Safety and Security	Railtrack Train Operating Companies	Franchising and franchise reviews. Possible partnership funding with Metro and Train Operating Companies
Passenger facilities and Information	Railtrack Train Operating Companies Metro	Franchising and franchise reviews. Possible partnership funding with Metro and Train Operating Companies
Light rail and tram/train hybrid proposals	Metro Railtrack Train Operating Companies	Feasibility studies

## 6. Route Development Plans

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## Airedale and Wharfedale Lines

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6	Kirkstall Apperley Bridge	Possible further new stations (see Appendix A). CrossHills (North Yorkshire scheme)
<b>Interchange and Integration</b>	V1, V6	Airport bus link from the new station at Apperley Bridge Feeder bus services to Baildon Feeder bus services Steeton & Silsden	Improved pedestrian links to/from Shipley and Ben Rhydding stations Bus link from Guiseley to Leeds/Bradford Airport
<b>Park and Ride</b>	V1	Keighley extension Shipley P&R extension Ben Rhydding P&R extension Crossflatts P&R extension	Additional park and ride facilities at Burley in Wharfedale, Guiseley and Steeton & Silsden.
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Information display at Frizinghall Functionality of existing system improved	Integrated road/rail information Enhanced passenger information system
<b>Safety and Security</b>	V7	Monitored CCTV including help and information facilities at all stations	Increased staff presence at key stations
<b>Platform extensions</b>	V6	Platform extensions at Burley in Wharfedale, Menston, Shipley, Ilkley, Frizinghall and Bradford Forster Square to accommodate four car trains.	
<b>Other Station Facilities</b>	V3	Ticket machines at all stations Ticket office facilities at Saltaire, Guiseley and Crossflatts Enhanced shelters at Saltaire, Frizinghall, Crossflatts, Steeton & Silsden, Baildon, Burley-in-Wharfedale, Ben Rhydding	
<b>Track and Signalling</b>	V6	Upgrade electrification to permit Inter-City services to operate between Shipley and Skipton. Reduced journey times	Further journey time reductions Track capacity enhancements
<b>Rolling Stock</b>	V1, V3	Introduction of Class 333 trains Additional centre cars to make all units 4 car	Additional new units for enhanced services
<b>Service Development</b>	V1, V6	Reduced journey times. 15 minute peak frequency between Keighley/Ilkley and Leeds. Additional Leeds-Morecambe services. Leeds-Morecambe trains to call at Bingley	Further journey time reductions Feeder rail services on Keighley and Worth Valley line. Additional Leeds-Carlisle-Scotland services Evaluate through Baildon-Leeds services

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Rail compatible link from Menston to an Otley Parkway station
- ◆ Rail compatible link between Bradford Forster Square and Bradford Interchange
- ◆ Through link to East Leeds stations (if Leeds-York route is electrified)
- ◆ Use of light rail technology on Wharfedale Line

## Caldervale Line (including Halifax to Huddersfield)

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6	Low Moor Possible further new stations (see Appendix A)	Possible further new stations (see Appendix A)
<b>Interchange and Integration</b>	V1, V6	Feeder bus services to Hebden Bridge and Sowerby Bridge. Improved pedestrian links between Hebden Bridge station and Hebden Bridge Cross boundary ticketing	
<b>Park and Ride</b>	V1	Additional car parking at Hebden Bridge, Sowerby Bridge, Mytholmroyd and Todmorden	Strategic (long distance) Park and Ride facility in Elland/Brighouse/Mirfield area (for M62)
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Real time information at Walsden, Todmorden, Hebden Bridge, Sowerby Bridge, Brighouse, New Pudsey and Bramley.	Integrated real time road -rail information along Calder Valley
<b>Safety and Security</b>	V7	Monitored CCTV coverage including help and information facilities at all stations	
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3	Improved waiting facilities and access at Todmorden Ticket Machines at all stations.	Sowerby Bridge - ticket office and waiting room.
<b>Track and Signalling</b>	V6	Reduced journey times between Leeds and Bradford Reduced journey times between Bradford and Manchester	Further journey time reductions Hall Royd Curve replacement at Todmorden to be considered with Railtrack and relevant Local Authorities
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	Additional rolling stock for new services
<b>Service Development</b>	V1, V6	Half hourly service between Huddersfield and Halifax Semi-fast service between Leeds and Manchester Victoria (via Dewsbury and Brighouse) Faster services between Bradford and Manchester Vic.	Additional skip-stop service to cater for new stations Additional peak services to/from Hebden Bridge

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ New rail-compatible Bradford-Leeds service
- ◆ Rail-compatible cross-Bradford link

## Hallam Line

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		Possible new stations (see Appendix A)
<b>Interchange and Integration</b>	V1, V6	Wakefield Kirkgate improvements including pedestrian links to town centre and Wakefield Waterfront. Castleford - improved pedestrian links to bus station.	
<b>Park and Ride</b>	V1	Development of Park and Ride at Normanton	
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Combined bus/rail/taxi information at all stations	Real time information at all stations
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6	Woodsford (platform 1) Castleford - both platforms Normanton	
<b>Other Station Facilities</b>	V3	Ticket machines at all stations Ticket Office and improved waiting facilities at Castleford	Consider staffing Wakefield Kirkgate and Normanton
<b>Track and Signalling</b>	V6	Reduction in journey times Evaluate use of Altofts curve for fast Leeds-Sheffield services	
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	
<b>Service Development</b>	V1, V6	Evaluate new semi-fast Sheffield-Barnsley-Leeds via Altofts	Extend some Sheffield-Wakefield services to York via Pontefract

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Sheffield-Bradford link via Barnsley and Crigglestone curve

## Harrogate Line

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6	Horsforth Woodside	
<b>Interchange and Integration</b>	V1, V6	Improved feeder bus services at Horsforth and Headingley Improved pedestrian links to/from Headingley Stadium	Rail-compatible link between Horsforth and Leeds/Bradford Airport
<b>Park and Ride</b>	V1	Additional parking at Horsforth New station at Horsforth Woodside	
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Automated public address at all stations Combined bus/rail/taxi information at all stations	Real time information at all stations
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6	Burley Park also stations in North Yorkshire to be considered	
<b>Other Station Facilities</b>	V3	Ticket machines at all stations Ticket office and improved waiting facilities at Horsforth	
<b>Track and Signalling</b>	V6	Reduced journey times Enhanced signalling Horsforth to Harrogate to improve punctuality	Further reduced journey times
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	Additional new trains
<b>Service Development</b>	V1, V6	Additional peak services New semi-fast service between Harrogate and Leeds. Hourly Leeds-Harrogate service all day Sunday	15 minute frequency between Leeds and Horsforth.

### LONG TERM VISION (2011-2020)

Options for further evaluation

- ◆ Fixed link to Leeds/Bradford Airport (light or heavy rail)
- ◆ Half hourly Leeds-York service via Harrogate

## Huddersfield Line (MetroTrain services)

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		Possible new stations (see Appendix A)
<b>Interchange and Integration</b>	V1, V6	Morley - improved links between station and town centre. Development of Huddersfield as a key interchange Improved pedestrian links between Huddersfield bus and rail stations. Improved pedestrian links between Dewsbury bus/ rail stns Improved bus links to Marsden and Slaithwaite stations.	Batley - improved links between station and town centre.
<b>Park and Ride</b>	V1	Extension of car parking at Mirfield and Huddersfield	Additional parking at Morley Ravensthorpe - Park and Ride provision and pedestrian links to proposed housing development.
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Combined bus/rail/taxi information at all stations Long Line Public Address at Marsden and Slaithwaite.	Real time information at all stations
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6	Huddersfield - platforms 5/6 Marsden, Slaithwaite, Deighton, Cottingley, Ravensthorpe, Mirfield	
<b>Other Station Facilities</b>	V3	Ticket machines at all stations Improved waiting facilities at Marsden, Slaithwaite and Deighton	Mirfield - ticket office and improved waiting facilities.
<b>Track and Signalling</b>	V6	Huddersfield - platform 5 Reduced journey times Railtrack TransPennine upgrade	
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	Additional units
<b>Service Development</b>	V1, V6	Half hourly local service between Leeds-Huddersfield Half hourly service to Marsden and Slaithwaite. Hourly Sunday service to Marsden and Slaithwaite	Through service from Marsden and Slaithwaite to Leeds

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ York - Castleford-Wakefield-Brighouse-Manchester Victoria service
- ◆ Rail compatible feeder service Heckmondwike and Cleckheaton to Dewsbury via former Spen Valley Line

## Penistone Line

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		
<b>Interchange and Integration</b>	V1, V6	Improved bus/rail interchange at Honley, Shepley and Brockholes.	
<b>Park and Ride</b>	V1		
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Provision of automated Long Line Public Address at all stations Combined bus/rail/taxi information at all stations	Real time information at all stations
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3	Improve passenger waiting facilities at Denby Dale, Brockholes, Stocksmoor and Lockwood. Ticket machines at all stations Taxi information at all stations	
<b>Track and Signalling</b>	V6	Reduced journey times Measures to improve punctuality	
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	Introduction of new units
<b>Service Development</b>	V1, V6	Through services to/from Leeds at peak times Feasibility study (with SYPTTE) to assess optimum service pattern	Revised service patterns with improved connections at Huddersfield and connections to Midland MainLine at Sheffield

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Half hourly service (infrastructure enhancements to be assessed)
- ◆ Extension of service to Bradford to provide through Bradford-Sheffield service
- ◆ Some trains routed via re-instated Stocksbridge Line south of Penistone



## Pontefract Line

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6	Glasshoughton	
<b>Interchange and Integration</b>	V1, V6	Castleford - improved links to bus station (see Hallam line) Pontefract Monkhill - improved bus and pedestrian links to town centre.	
<b>Park and Ride</b>	V1	Glasshoughton Knottingley and Pontefract Monkhill - expand park and ride provision and improve security.	
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	Featherstone - pedestrian links to proposed housing.
<b>Passenger Information</b>	V1	Real time information at all stations Combined bus/rail/taxi information at all stations	
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6		Pontefract Monkhill Knottingley Streethouse Featherstone Wakefield Kirkgate
<b>Other Station Facilities</b>	V3	Ticket machines at all stations Ticket office at Castleford	
<b>Track and Signalling</b>	V6	Reduced journey times	Further reduction in journey times
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	
<b>Service Development</b>	V1, V6	Extension of Pontefract-Wakefield service to Knottingley and Leeds Leeds -Knottingley increased to 30 minute frequency	Extend Wakefield-Pontefract/ Knottingley services to Goole 2 hourly Extend some Sheffield-Wakefield services to York via Pontefract

### LONG TERM VISION (2011-2020)

Options for further evaluation

- ◆ Rail compatible feeder service Castleford-Allerton Bywater - Kippax (Parkway) - Garforth
- ◆ Extension of some Leeds-Knottingley services to Doncaster via Norton/ Askern (SYPTTE aspiration)

## Wakefield Line

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6	Possible new stations (see Appendix A)	Possible further new stations (see Appendix A)
<b>Interchange and Integration</b>	V1, V6	Develop Wakefield Westgate as a key interchange, with additional feeder bus services.	
<b>Park and Ride</b>	V1	Additional car parking at Sandal and Agbrigg	Park and ride provision at Fitzwilliam and Moorthorpe Strategic Park and Ride site linked to M1 and M62 motorways
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations Passenger lifts to both platforms at Wakefield Westgate.	
<b>Passenger Information</b>	V1	Public Address at Moorthorpe Extend provision of Passenger Information Displays to all stations (all platforms) Combined bus/rail/taxi information at all stations	
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6	South Elmsall (Leeds bound platform) Fitzwilliam, Sandal and Agbrigg Outwood	
<b>Other Station Facilities</b>	V3	Ticket machines at all stations	
<b>Track and Signalling</b>	V6		Additional capacity may be required.
<b>Rolling Stock</b>	V1, V3	Increase capacity of electric units on Leeds-Doncaster services New MetroTrain diesel units on Leeds - Sheffield services.	Additional units
<b>Service Development</b>	V1, V6	New fast Leeds-Sheffield service Additional peak services to/from Leeds. Pontefract-Wakefield service extended to Leeds	Half hourly service between Leeds and Doncaster

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Further service expansion

## York and Selby Lines

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		Possible new stations (see Appendix A)
<b>Interchange and Integration</b>	V1, V6	Micklefield and Garforth bus links East Garforth - improve bus/rail interchange Integration with East Leeds Quality Bus Corridor	
<b>Park and Ride</b>	V1	Micklefield and Cross Gates interchanges, including park and ride.	Further expansion of Garforth car park
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Extend provision of Passenger Information Displays to all stations (all platforms) Combined bus/rail/taxi information at all stations	
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6	Cross Gates - extend platforms to accommodate Intercity trains.	New bay platform at Micklefield.
<b>Other Station Facilities</b>	V3	Ticket machines at all stations	Ticket Office at Micklefield
<b>Track and Signalling</b>	V6		Additional capacity east of Leeds (to Cross Gates). Possible electrification between Leeds and York
<b>Rolling Stock</b>	V1, V3	Introduction of new MetroTrain diesel rolling stock	
<b>Service Development</b>	V1, V6	Additional peak services from East Leeds.	New Leeds- Micklefield stopping service

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Rail Compatible feeder service from Scholes and Thorner on former rail alignment
- ◆ Rail compatible link Castleford-Allerton Bywater - Kippax (Parkway) - Garforth
- ◆ New City Centre station in Leeds (East of existing station) and extension of through services

## TransPennine Services

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		Potential strategic Park and Ride site
<b>Interchange and Integration</b>	V1, V6	Development of Huddersfield as a major interchange Improved connections with MetroTrain services at Huddersfield	
<b>Park and Ride</b>	V1		Strategic (long distance) Park and Ride facility in Elland/ Brighouse/ Mirfield area (to serve M62)
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1	Combined bus/rail/taxi information at all stations	
<b>Safety and Security</b>	V7	Monitored CCTV, including help and information facilities, coverage of all stations	
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3		
<b>Track and Signalling</b>	V6	Railtrack TransPennine upgrade including additional passing loops	
<b>Rolling Stock</b>	V1, V3	New, higher capacity rolling stock	
<b>Service Development</b>	V1, V6	Reduce Leeds - Manchester journey time to 52 minutes. Enhancements to Leeds-Bradford-Blackpool services	15 minute frequency between Leeds and Manchester Piccadilly, with a 45 minute journey time.

### LONG TERM VISION (2011-2020)

Options for further evaluation:

- ◆ Further journey time enhancements

## East Coast Main Line Services

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		
<b>Interchange and Integration</b>	V1, V6	Develop Wakefield Westgate as a major interchange	
<b>Park and Ride</b>	V1		Potential Parkway station
<b>Accessibility</b>	V2	Compliance with DDA requirements at all stations	
<b>Passenger Information</b>	V1		
<b>Safety and Security</b>	V7		
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3		
<b>Track and Signalling</b>	V6	Upgrade Aire Valley electrification between Shipley and Skipton to allow operation of InterCity electric trains.	
<b>Rolling Stock</b>	V1, V3	New rolling stock or refurbished rolling stock for London services	New rolling stock for London services
<b>Service Development</b>	V1, V6	Additional through services to Bradford, Skipton and Harrogate (with a call at Horsforth) Half-hourly service between Leeds and London, with reduced journey times.	Reduction of Leeds/Bradford to London journey times Expansion of through services to Edinburgh/Glasgow.

### LONG TERM VISION (2011-2020)

- ◆ Further reductions in Leeds/Bradford- London journey times

## Cross Country Services

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		
<b>Interchange and Integration</b>	V1, V6		
<b>Park and Ride</b>	V1		
<b>Accessibility</b>	V2		
<b>Passenger Information</b>	V1		
<b>Safety and Security</b>	V7		
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3		
<b>Track and Signalling</b>	V6		
<b>Rolling Stock</b>	V1, V3	New rolling stock	
<b>Service Development</b>	V1, V6	Improved reliability half-hourly Leeds-Sheffield service, with reduced journey time. Improved local connections to early and late departures/arrivals.	

### LONG TERM VISION (2011-2020)

- ◆ Potential Parkway station
- ◆ Further reductions in journey times

## Midland MainLine Services

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		
<b>Interchange and Integration</b>	V1, V6		
<b>Park and Ride</b>	V1		Potential Parkway station
<b>Accessibility</b>	V2		
<b>Passenger Information</b>	V1		
<b>Safety and Security</b>	V7		
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3		
<b>Track and Signalling</b>	V6		
<b>Rolling Stock</b>	V1, V3		
<b>Service Development</b>	V1, V6	Additional services between Leeds and Sheffield	

### LONG TERM VISION (2011-2020)

- ◆ Further service development

## Channel Tunnel (Eurostar) Services

	Link to Vision	Short Term (2000-2005)	Medium Term (2006-2010)
<b>New Stations</b>	V1, V6		
<b>Interchange and Integration</b>	V1, V6		
<b>Park and Ride</b>	V1		
<b>Accessibility</b>	V2		
<b>Passenger Information</b>	V1		
<b>Safety and Security</b>	V7		
<b>Platform extensions</b>	V6		
<b>Other Station Facilities</b>	V3		
<b>Track and Signalling</b>	V6		
<b>Rolling Stock</b>	V1, V3		
<b>Service Development</b>	V1, V6	Eurostar services between West Yorkshire and Paris	Eurostar services between Leeds and Paris and Brussels

### LONG TERM VISION (2011-2020)

- ◆ Additional services to/from West Yorkshire



## Appendix A

### Potential New Stations

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Line	Priority sites	Other sites to be considered
Airedale/ Wharfedale	Kirkstall Apperley Bridge	Calverley [CrossHills - North Yorkshire CC scheme]
Caldervale	Low Moor	Elland Salterhebble Hipperholme Laisterdyke Armley Cornholme/Portsmouth
Hallam		Haigh Crigglestone
Harrogate	Horsforth Woodside	Arthington Parkway
Huddersfield		White Rose Centre Thornhill Horbury Milnsbridge
Penistone		
Pontefract	Glasshoughton	Methley Knottingley East Ferrybridge
Wakefield		Wrenthorpe Crofton Hemsworth Ardsley Beeston/Elland Road
York and Selby		Osmandthorpe Thorpe Park Leeds Parish Church

## Appendix B

### Station Development Strategy

Station	Current Facilities	Planned Improvements
Baildon	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Passenger Information Screens</li> <li>• Long Line Public Address</li> <li>• Car Park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Feeder bus services to Baildon</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine</li> <li>• Integrated rail/road information</li> <li>• Improved waiting facilities</li> </ul>
Batley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• CCTV on platform and car park</li> <li>• Long Line Public Address</li> <li>• Car Park</li> <li>• Long Line Public Address</li> <li>• Telephone</li> <li>• Cycle lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved links between station and town centre</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Real time information</li> </ul>
Ben Rhydding	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Car Park</li> <li>• Passenger Information Screens</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved pedestrian links</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Additional car parking</li> </ul>
Berry Brow	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Public address system</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Provision of automated long-line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> </ul>

Station	Current Facilities	Planned Improvements
		<ul style="list-style-type: none"> <li>• Ticket machine</li> <li>• Taxi information</li> <li>• Real time information</li> </ul>
Bingley	<ul style="list-style-type: none"> <li>• Ticket Office</li> <li>• Waiting rooms</li> <li>• Car park</li> <li>• CCTV on platforms and car park</li> <li>• Public address system</li> <li>• Electronic information screens</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail facilities and information</li> <li>• Enhanced passenger information</li> <li>• Increased staff presence</li> </ul>
Bradford Forster Square	<ul style="list-style-type: none"> <li>• Ticket Office</li> <li>• Shelter and seating</li> <li>• Electronic information Screens</li> <li>• Disabled toilet</li> <li>• Newspaper/confectionary shop</li> <li>• Car park</li> <li>• CCTV in car park and on platforms</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machines</li> <li>• Integrated road/rail information</li> <li>• Increased staff presence</li> </ul>
Bradford Interchange	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room and seating</li> <li>• Electronic information screens</li> <li>• Public address system</li> <li>• Toilets and buffet are available on the lower level</li> <li>• Telephones</li> </ul>	<ul style="list-style-type: none"> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machines</li> <li>• Integrated road/rail information</li> <li>• Enhanced passenger information system</li> <li>• Increased staff presence</li> <li>• ‘One Stop Shop’ Travel Centre</li> </ul>

Bramley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger information display</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Automated Long Line Public Address</li> <li>• Passenger waiting facility improvements</li> <li>• Additional car parking</li> </ul>
Brighouse	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car Park</li> <li>• Public address system</li> <li>• Passenger information displays</li> <li>• Monitored CCTV</li> <li>• Telephone</li> <li>• Disabled access</li> </ul>	<ul style="list-style-type: none"> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> </ul>
Brockholes	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus/rail interchange</li> <li>• Improve passenger waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Provision of automated long-line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine</li> <li>• Real time information</li> </ul>
Burley in Wharfedale	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Car park</li> <li>• Passenger Information Screens</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Additional park and ride facilities</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Integrated road/rail information</li> <li>• Ticket machine on each platform</li> <li>• Enhanced passenger waiting facilities</li> </ul>
Burley Park	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>

		<ul style="list-style-type: none"> <li>• Long Line Public Address</li> <li>• Passenger information Screens</li> </ul>
Castleford	<ul style="list-style-type: none"> <li>• Canopy and seating</li> <li>• Long Line Public Address</li> <li>• Telephone</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Improved pedestrian links to bus station</li> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket office with ticket machines</li> <li>• Passenger Information Screens</li> </ul>
Cottingley	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Long Line Public address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Real time information</li> <li>• Passenger information displays</li> </ul>
Cross Gates	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• CCTV on platform and on car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Interchange, including park and ride</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Extend platforms to accommodate InterCity trains</li> <li>• Improved passenger waiting facilities</li> </ul>
Crossflatts	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• CCTV in car park</li> <li>• Passenger Information Displays</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Additional park and ride facilities</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Enhanced passenger information system</li> <li>• Improved passenger waiting facilities</li> </ul>
Darton	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Telephone</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Enhanced passenger information system</li> </ul>
Deighton	<ul style="list-style-type: none"> <li>• Seating</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> </ul>

	<ul style="list-style-type: none"> <li>• Public address system</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Real time information – Passenger information displays</li> <li>• Improved passenger waiting facilities</li> </ul>
Denby Dale	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> <li>• Cycle lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved passenger waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Provision of automated long-line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Ticket machine</li> <li>• Taxi information</li> <li>• Real time information – Passenger information displays</li> </ul>
Dewsbury	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room and seating</li> <li>• Canopies and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• CCTV on platform</li> <li>• Taxi rank</li> <li>• Pub/café</li> <li>• Telephone</li> <li>• Newsagent</li> <li>• Passenger operated lifts being installed</li> </ul>	<ul style="list-style-type: none"> <li>• Improved pedestrian link between bus and rail station</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Real time information</li> </ul>
East Garforth	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• CCTV on platform</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improve bus/rail interchange</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combine bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>

Featherstone	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Telephone</li> <li>• Long Line Public Address</li> </ul>	<ul style="list-style-type: none"> <li>• Pedestrian links to proposed housing development</li> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Real time information – passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Fitzwilliam	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Park and ride provision</li> <li>• Compliance with DDA requirements</li> <li>• Information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Ticket machine on each platform</li> <li>• Improved passenger waiting facilities</li> </ul>
Frizinghall	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• Passenger Information Display</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Improved passenger waiting facilities</li> </ul>
Garforth	<ul style="list-style-type: none"> <li>• Ticket office with ticket machine</li> <li>• Waiting room and seating</li> <li>• Shelter and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• CCTV on platform and in car park</li> <li>• Telephone</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Bus links</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Improved passenger waiting facilities – York/Selby platform</li> <li>• Ticket machine on York/Selby-bound platform</li> </ul>
Guiseley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Car park</li> <li>• Passenger Information Displays</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Additional park and ride facilities</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Ticket office with enhanced passenger waiting facilities</li> </ul>
Halifax	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room</li> </ul>	<ul style="list-style-type: none"> <li>• Monitored CCTV including help and information facilities</li> <li>• Integrated real time road-rail information</li> </ul>

	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Passenger Information Displays</li> <li>• Car park</li> <li>• CCTV on platform and car park</li> <li>• Taxi rank</li> <li>• Telephone</li> <li>• Confectionary shop</li> <li>• Passenger operated lift</li> <li>• Cycle Lockers</li> <li>• Disabled persons' toilet</li> </ul>	<ul style="list-style-type: none"> <li>• Additional car parking</li> <li>• Passenger toilet facilities</li> </ul>
Headingley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved feeder bus services</li> <li>• Improved pedestrian links to Headingley Stadium</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Improved passenger waiting facilities</li> <li>• Ticket machine on each platform</li> <li>• Long line public address</li> <li>• Passenger information displays</li> </ul>
Hebden Bridge	<ul style="list-style-type: none"> <li>• Ticket office and waiting rooms</li> <li>• Canopies and seating</li> <li>• Toilets</li> <li>• Station buffet</li> <li>• Car park</li> <li>• Telephone</li> <li>• CCTV on platform and car park</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved feeder bus services</li> <li>• Improved pedestrian links</li> <li>• Additional car parking</li> <li>• Passenger information displays</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV coverage including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated real time information along Calder Valley</li> </ul>
Honley	<ul style="list-style-type: none"> <li>• Canopy and seating</li> <li>• Telephone</li> <li>• Cycle lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus/rail interchange</li> <li>• Compliance with DDA requirements</li> <li>• Long-line public address</li> <li>• Ticket machine</li> <li>• Taxi information</li> <li>• Passenger information screens</li> </ul>
Horsforth	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Improved feeder bus services</li> <li>• Ticket office with improved passenger waiting facilities</li> </ul>



	<ul style="list-style-type: none"> <li>• Cycle Lockers</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Long line public address</li> <li>• Passenger information screens</li> <li>• Ticket machine on each platform</li> <li>• Taxi information</li> </ul>
Huddersfield	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting rooms</li> <li>• Canopies and seating</li> <li>• Passenger Information Displays</li> <li>• Public address system</li> <li>• Car park</li> <li>• Telephones</li> <li>• Taxi rank</li> <li>• Station buffet</li> <li>• Confectionary shop</li> <li>• Cycle lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Huddersfield as a key interchange</li> <li>• Improved pedestrian link between Huddersfield bus and rail stations</li> <li>• Platform extensions to Platforms 5 and 6</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> </ul>
Ilkley	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room</li> <li>• Seating</li> <li>• Long Line Public Address</li> <li>• Passenger Information Displays</li> <li>• Car park</li> <li>• Telephones</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machines</li> <li>• Improved integration of road/rail travel</li> <li>• Increased staff presence</li> </ul>
Keighley	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Shelters with seating</li> <li>• Electronic information screens</li> <li>• Public address system</li> <li>• Free car park</li> <li>• CCTV on platforms and car park</li> </ul>	<ul style="list-style-type: none"> <li>• Park and Ride Extension</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail travel</li> <li>• Enhanced passenger information system</li> </ul>

	<ul style="list-style-type: none"> <li>• Station buffet café</li> <li>• Taxi rank</li> <li>• Telephone</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Increased staff presence</li> </ul>
Knottingley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Public address system</li> <li>• Free car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Expand park and ride provision and improve security</li> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Real time information</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Leeds	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Reservation booking office</li> <li>• Shelters and seating</li> <li>• Waiting rooms</li> <li>• Shopping precinct</li> <li>• Cash machines</li> <li>• Taxi rank</li> <li>• Restaurants/bars</li> <li>• Telephones</li> <li>• Electronic information screens</li> <li>• Public address system</li> <li>• Car park</li> <li>• CCTV</li> </ul>	<ul style="list-style-type: none"> <li>• New footbridge with stairs, escalators and passenger operated lifts</li> <li>• New roof to station</li> <li>• Additional platforms</li> <li>• Greater track capacity for handling more trains</li> <li>• New signalling system</li> <li>• New centrally monitored CCTV system</li> <li>• New passenger information displays</li> <li>• Bus/rail interchange on New Station Street</li> <li>• Automated ticket barrier</li> <li>• Improved ticket/information facilities</li> </ul>
Lockwood	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improve passenger waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Provision of automated long-line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine</li> <li>• Taxi information</li> <li>• Passenger information displays</li> </ul>

Marsden	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Car park</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus links</li> <li>• Platform extension</li> <li>• Improved waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Provision of automated long-line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Taxi information</li> <li>• Passenger information displays</li> </ul>
Menston	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Car park</li> <li>• CCTV on platform and in car park</li> <li>• Ticket Office and Waiting Rooms</li> <li>• Long Line Public Address</li> <li>• Passenger Information Displays</li> <li>• Telephone</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> </ul>
Micklefield	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car parks</li> <li>• CCTV on platforms and car parks</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Bus links</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV, including help and information facilities</li> <li>• Ticket office</li> <li>• Ticket machine on each platform</li> <li>• New bay platform with turn-back facility</li> <li>• Additional park and ride facilities</li> </ul>
Mirfield	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• CCTV in car park</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Extension of car parking</li> <li>• Platform extension</li> <li>• Ticket office and improved waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Passenger information displays</li> </ul>

		<ul style="list-style-type: none"> <li>• Possible relocation of station due to TPE enhancement scheme</li> </ul>
Moorthorpe	<ul style="list-style-type: none"> <li>• Shelters</li> <li>• Car Park</li> </ul>	<ul style="list-style-type: none"> <li>• Park and ride provision</li> <li>• Compliance with DDA requirements</li> <li>• Long line public address</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Morley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved links between station and town centre</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Passenger information displays</li> <li>• Improved passenger waiting facilities</li> <li>• Additional car parking</li> </ul>
Mytholmroyd	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Telephone</li> <li>• Long Line Public Address</li> </ul>	<ul style="list-style-type: none"> <li>• Car parking</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV coverage including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Passenger information displays</li> </ul>
New Pudsey	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room</li> <li>• Toilets</li> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> <li>• CCTV on platforms and car park</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger information displays</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV coverage including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Long line public address</li> <li>• Passenger information displays</li> <li>• Improved ticket office and passenger waiting facilities</li> </ul>
Normanton	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Car park</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Park and Ride</li> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine</li> <li>• Passenger information displays</li> </ul>
Outwood	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> </ul>

	<ul style="list-style-type: none"> <li>• Long Line Public Address</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Ticket machine on each platform</li> </ul>
Pontefract Monkhill	<ul style="list-style-type: none"> <li>• Shelters with seating</li> <li>• Car park</li> <li>• Telephone</li> <li>• Long Line Public Address</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus and pedestrian links to town centre</li> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/tax in information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Additional car parking</li> </ul>
Pontefract Tanshelf	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/tax in information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Ravensthorpe	<ul style="list-style-type: none"> <li>• Shelter and seating</li> <li>• Long Line Public Address</li> <li>• Telephone</li> <li>• Car Park</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Park and ride provision</li> <li>• Pedestrian links to proposed housing development</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Passenger information displays</li> <li>• New shelter to Huddersfield bound platform</li> </ul>
Saltaire	<ul style="list-style-type: none"> <li>• Shelters and Seating</li> <li>• Public address system</li> <li>• Passenger Information Displays</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Ticket office facilities</li> <li>• Enhanced shelters</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> </ul>
Sandal and Agbrigg	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car Park</li> <li>• CCTV in car park</li> <li>• Monitored CCTV including help and</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Additional car parking</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> </ul>

	<ul style="list-style-type: none"> <li>information facilities</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Combined bus/rail/taxi information</li> <li>• Improved waiting facilities</li> <li>• Ticket machine on each platform</li> </ul>
Shepley	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus/rail interchange</li> <li>• Compliance with DDA requirements</li> <li>• Long line public address</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Taxi information</li> <li>• Passenger information displays</li> </ul>
Shipley	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting room</li> <li>• Shelter/canopies and seating</li> <li>• Passenger Information Displays</li> <li>• Long Line Public Address</li> <li>• Telephone</li> <li>• Car park</li> <li>• CCTV in car park and platforms</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Park and Ride extension</li> <li>• Platform extension</li> <li>• Improved pedestrian links</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> <li>• Increased staff presence</li> </ul>
Slaithwaite	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Improved bus links</li> <li>• Long line public address</li> <li>• Platform extensions</li> <li>• Improved waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Long-line public address</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Taxi information</li> <li>• Passenger information displays</li> </ul>
South Elmsall	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Car park</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Information displays</li> </ul>

	<ul style="list-style-type: none"> <li>• Taxi rank</li> <li>• Telephone</li> <li>• Monitored CCTV including help and information facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Combined bus/rail/taxi information</li> <li>• Passenger information displays</li> <li>• Ticket machine on each platform</li> </ul>
Sowerby Bridge	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> <li>• Long Line Public Address</li> <li>• CCTV in car park</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Feeder bus services</li> <li>• Additional car parking</li> <li>• Passenger information displays</li> <li>• Ticket office and waiting room</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV coverage including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated real time road-rail information along the Calder Valley</li> </ul>
Steeton and Silsden	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Car park</li> <li>• Telephone</li> <li>• Passenger Information Displays</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Feeder bus services</li> <li>• Additional park and ride facilities</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Integrated road/rail information</li> </ul>
Stocksmoor	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Improved passenger waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Long line public address</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Taxi information</li> <li>• Passenger information displays</li> </ul>
Streethouse	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Car park</li> <li>• Telephone</li> <li>• Long Line Public Address</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Todmorden	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting rooms</li> <li>• Car park</li> <li>• CCTV on platform and in car park</li> <li>• Taxi office</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger information displays</li> <li>• Improved waiting facilities</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>

	<ul style="list-style-type: none"> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated real time road-rail information along Calder Valley</li> <li>• Better bus links including between bus and rail stations</li> </ul>
Walsden	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Long Line Public Address</li> <li>• Telephone</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger Information displays</li> <li>• Compliance with DDA requirements</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Wakefield Kirkgate	<ul style="list-style-type: none"> <li>• Canopies and seating</li> <li>• Car park</li> <li>• CCTV on platform and in car park</li> <li>• Long Line Public Address</li> <li>• Taxi rank</li> <li>• Telephone</li> <li>• Cycle Lockers</li> </ul>	<ul style="list-style-type: none"> <li>• Improved pedestrian links</li> <li>• Platform extension</li> <li>• Compliance with DDA requirements</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> <li>• Passenger information displays</li> </ul>



Wakefield Westgate	<ul style="list-style-type: none"> <li>• Ticket office</li> <li>• Waiting rooms</li> <li>• Canopy and seating</li> <li>• Public Address</li> <li>• Passenger Information Displays</li> <li>• Car park</li> <li>• CCTV on platform and car park</li> <li>• Station buffet</li> <li>• Taxi rank</li> <li>• Telephones</li> <li>• Cash machines</li> <li>• Newsagent</li> <li>• Toilets</li> </ul>	<ul style="list-style-type: none"> <li>• Improved station environment</li> <li>• Develop as a key interchange</li> <li>• Additional feeder bus services</li> <li>• Passenger lifts to both platforms</li> <li>• Compliance with DDA requirements</li> <li>• Improvements to information displays</li> <li>• Combined bus/road/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>
Woodlesford	<ul style="list-style-type: none"> <li>• Shelters and seating</li> <li>• Telephone</li> <li>• Long Line Public Address</li> <li>• Car park</li> <li>• CCTV in car park</li> </ul>	<ul style="list-style-type: none"> <li>• Platform extensions</li> <li>• Compliance with DDA requirements</li> <li>• Passenger information displays</li> <li>• Combined bus/rail/taxi information</li> <li>• Monitored CCTV including help and information facilities</li> <li>• Ticket machine on each platform</li> </ul>

## **WEST YORKSHIRE CYCLING STRATEGY**

### **INTRODUCTION**

1. The Strategy describes the potential for, and the means by which, cycling can contribute to meeting overall Local Transport Plan objectives and targets within West Yorkshire. It also has fundamental relationships with national, regional and local policies and strategies:

- A New Deal For Transport, the National Cycling Strategy that was launched in July 1996, and Planning Policy Guidance notes, particularly PPG13 on transport
- Regional Planning Guidance and Regional Transport Strategy
- The land use planning, transport, environmental and leisure policies contained in the Unitary Development Plans of the five district authorities.

2. The Strategy is intended to inform the public and cycling interest groups, and to guide planners and highway and traffic engineers in the development of integrated programmes of schemes and measures and the assessment of other development proposals. It deals with all aspects of catering for and encouraging both utility and leisure cycling, addressing safety, perceived danger, theft and other issues that discourage cycling.

3. The West Yorkshire Cycling Strategy draws on and guides the co-ordination of contributions from a range of organisations working together and sharing ideas, priorities and resources. In particular it will contribute to achieving the policies and objectives of the health authorities.

4. The Strategy is translated into detailed cycling action plans developed by the individual authorities. These include maps produced to a common base that show the priority routes for addressing problems and where we will be providing new facilities and measures within the five-year LTP period.

5. Included with this Strategy is a map showing the existing and future routes that will combine to form a strategic cycle network for West Yorkshire, including those that are or will be part of the National Cycle Network.

### **BACKGROUND**

6. There is considerable potential for meeting a much greater proportion of travel demand by cycling. Over two million cycles are sold in Britain every year, more than the number of cars sold. Over 90% of men and 67% of women are able to ride a cycle. Almost three quarters of all personal journeys are less than five miles in length, which is a distance reasonably suited to cycling, and half of all journeys are less than two miles.

7. However at present cycling is an under used and under exploited form of transport. Nationally less than 2% of trips are made by cycle and within West Yorkshire it is less than 1%. These figures compare badly with some other European countries, for example, in Sweden 10% of journeys are made by cycle, in Germany 11%, in Switzerland 15% and in Denmark 18%. In Britain only 2% of secondary school children cycle to school compared with 60% in the Netherlands.

8. There is considerable survey evidence available for certain national routes to demonstrate that where good quality cycle tracks and other facilities have been

provided this has attracted high levels of cycle use. This suggests that there could be a major demand for cycling, which is currently suppressed by the prevailing conditions on the highway.

9. Encouraging more people to cycle will bring benefits to the whole community:
- improved health through increased fitness, reduced risk of heart attack, weight control and reduced stress;
  - reduced noise, air pollution, and congestion leading to enhancement of the local environment and quality of life;
  - reduced greenhouse gas emissions
  - less consumption of non-renewable energy resources;
  - economic gains through cycle tourism and leisure;
  - independence for people who cannot or do not wish to use a car;
  - in urban areas, cycling can be the quickest and most convenient form of transport, and requires less valuable land to be taken up for parking.

## **OBJECTIVES**

10. The Local Transport Plan sets out the overall transport objectives for West Yorkshire. Primary objectives are grouped under economic, social (including safety) and environmental headings. Subsidiary objectives relate to reducing the rate of growth in road traffic, encouraging a greater proportion of journeys to be made by alternative modes to the private car and improving integration between transport modes. For cycling there are four more specific objectives listed below:

- to encourage more people to cycle more often for both utility and leisure journeys, and so help to reduce the dependency on private cars;
- to develop a safe, convenient, efficient and attractive transport infrastructure that encourages and facilitates cycling;
- to reduce the casualty rate of cyclists;
- to ensure that policies to increase cycling and meet the needs of cyclists are integrated into all appropriate Policies, Plans, Strategies and resources bids.

11. Working towards these will contribute to meeting the primary and subsidiary objectives.

## **STRATEGY**

12. The West Yorkshire Transport Strategy is based on four inter-related themes and again cycling is an integral part:

- improving the quality and availability of alternative modes to the car;
- managing the use and condition of the highway;
- demand management (including influencing attitudes, Travel Plans for companies and organisations, and safer routes to school initiatives);
- measures to promote social inclusion.

## TARGETS

13. The National Cycling Strategy, launched in July 1996, set headline targets to double cycle use by the year 2002 and then double again by 2012. Responsibilities were identified for local authorities to contribute by setting local targets and producing strategies that will develop a cycling culture.

14. Targets need to relate to the objectives, be measurable, and be achievable. The following targets have been adopted:

- to double the overall number of trips by cycle by 2002 and double again by 2012 from a base of 1996 levels (National Target);
- 5% of journeys to work in the major urban centres to be by cycle by 2012;
- 10% of the trips by pupils of 11 years and older in schools that have implemented school travel initiatives to be by cycle by 2012;
- to provide cycle safety training for 20% of all 10 to 12 year olds by 2002, and 50% by 2012;
- to reduce overall cyclist fatalities and serious casualties by 40%, and 50% for children, and a 10% reduction in slight casualties, by the year 2010 compared with the 1994 -1998 average (National Target)

## MECHANISMS

15. The mechanisms to achieve the objectives and targets will be undertaken through programmes of work that have been grouped for convenience under the headings of engineering and planning, encouragement, education and enforcement.

16. Because of the diversity of the county, implementation will need to take account of local conditions and problems; it will not be possible for all the mechanisms to be implemented in every area. Resource constraints and the implications of local priorities will affect the speed of implementation.

### ***Engineering and Planning***

The primary aims of engineering and planning measures are to provide a cycle friendly infrastructure comprising the road network, modified where necessary, and supplemented by cycle tracks to enable cyclists to reach all destinations safely and conveniently. The networks will be based on rolling programmes of reviews and assessments of the existing cycle routes and road network.

#### **• Develop a high quality cycle route network for West Yorkshire**

The proposed strategic network is shown on the accompanying map. Of particular importance are the routes that are planned to become part of the National Cycle Network, and these will be provided within the five-year programme of the LTP. More detailed local networks will also be developed and shown in the action plans of the five district councils. Some routes will cater largely for local movements; others will also satisfy strategic movements within West Yorkshire and cross-boundary routes into neighbouring authority areas.

Sections of the networks will be developed using opportunities arising from reclamation schemes, new developments, canal towpaths, parks, disused railways and other tracks. The routes will be designed for both utility and leisure cycling. Links

will be provided to local shopping centres, business and residential areas, education establishments and leisure attractions.

The networks will achieve high standards of coherence, directness, safety, attractiveness and comfort. Use will be made of existing roads and tracks incorporating, where appropriate, measures to make them safer for cycling. Off road links will be considered where they can provide additions to the network that are useful and attractive to cyclists.

- **Provide measures, wherever possible, which improve cyclists' safety and give cyclists greater accessibility and journey time advantages over private motor traffic and which are cost effective.**

Measures will include:

- traffic management to reduce traffic volumes, supported wherever possible by exemption for cyclists from restrictions applying to general traffic, where it is safe to do so, such as one-way streets and road closures;
- cycle friendly traffic calming and speed reduction on both urban and rural roads;
- cycle lanes, cycle tracks, cycle / bus lanes and widened near-side lanes;
- junction modifications including advance stop lines and changes in priority;
- toucan crossings and cycle priority phases at traffic signals;
- direction signing of routes;
- shared use of suitable footways where there are no practical alternatives.

The design of measures to assist cycling will be sensitive to the needs and well being of pedestrians and people with mobility difficulties. This is of particular importance where the possibility of cyclists sharing space with pedestrians is being considered.

The following means will be adopted as appropriate in route design: traffic reduction, traffic calming, junction treatment and traffic management, redistribution of the carriageway, cycle lanes and cycle tracks. The design of all measures will be based on appropriate national guidelines

- **Ensure that new land use development proposals are located and designed to be cycling friendly.**

Best practice guidance will be provided to assist developers to incorporate high quality access and facilities for cyclists. This will be the responsibility of individual local authorities.

Advantage will be taken of the opportunities provided by developments to introduce facilities for cyclists. Transport Impact Assessments, which are a requirement of PPG13, will need to demonstrate that the needs of cyclists have been fully taken into account. In accordance with the policies of the relevant district Unitary Development Plans, planning conditions will be employed to ensure the provision of appropriate cycle facilities.

- **Undertake appropriate levels of maintenance of all cycle facilities and on roads where there is a significant cycle usage.**

A high standard of maintenance is essential. The quality of the riding surface is a more important determinant of the attractiveness of a route for cyclists than it is for car drivers. Poor surfaces will not only deter cyclists from using a route but are also inherently dangerous.

Facilities will be designed to (high) standards that minimise future maintenance liabilities. Cycle tracks that are constructed to appropriate standards, perform legitimate transport functions and create useful links in the network will be adopted.

Maintenance will include rapid response repairs to dangerous potholes, regular sweeping, street lighting repairs, salting in winter and cutting back vegetation. The two metre strip alongside the kerb is where most cyclists ride on any road and so needs the greatest attention for maintenance.

Specific standards for the maintenance of cycle facilities and routes will be adopted, subject to available resources.

- **Include a cycle audit within highway and land use development scheme procedures.**

The Local Transport Plan adopts a “hierarchy of consideration” which places cyclists near the top. Cycle audits will be used to check that the needs of cyclists have been considered during the design and implementation of each scheme and appropriate options chosen. Use will be made of the various national publications that give guidance on carrying out cycle audits.

- **Ensure that land use development does not sever routes used by cyclists or unjustly prejudice accessibility of cyclists.**

- **Protect disused railway lines and other potential cycle routes from development.**

Disused rail lines can make ideal off road cycle tracks for both leisure and utility use. However, just one building can isolate long lengths of track.

- **Promote the integration of cycling and public transport to facilitate cycle use as part of longer journeys.**

This will be developed in partnership with the public transport operators and will include the provision of parking facilities at bus and rail stations, the development of cycle park and ride and the carriage of cycles on public transport vehicles. Also cycle routes that link to strategic public transport interchanges will be developed.

- **Provide cycle parking at retail centres, educational establishments, transport interchanges and other facilities used by the public.**

Cycle parking needs to be conveniently located with the level of security being appropriate to the location and expected duration of stay. Requirements will be determined in consultation with local managers where appropriate.

- **Adopt guidelines for cycle parking standards applicable to existing and new developments.**

A balance needs to be achieved between parking for cars and parking for cycles. The new PPG 13 requires developers to provide secure cycle parking facilities in accordance with standards to be adopted by local authorities.

## ***Encouragement***

- **Local authorities will produce and implement Travel Plans and encourage other employers to follow suit.**

Employees can be encouraged to cycle by the provision of secure cycle parking, showers and changing facilities, cycle mileage allowances, loans for the purchase of bikes. Such measures should be adopted wherever appropriate in Travel Plans. Local authorities should set an example as cycle friendly employers and will actively encourage other employers, especially hospitals, to adopt Travel Plans that promote cycling.

- **Work with schools to encourage and facilitate safe cycling and promote cycling as part of safer routes to schools initiatives.**

Developing safer routes to school initiatives includes providing secure cycle parking facilities and cycle training, in addition to physical road safety improvements on the highway. Publicity to promote the benefits of cycling should also be carried out, namely improved fitness and independent mobility of school children. Close co-operation with school staff, governing bodies, children and their parents will be essential. Implementing Travel Plans for schools will also be encouraged.

- **Work with Health Authorities to develop health promotion initiatives.**

The health authorities are keen to spread the health message and there is scope for cooperation and co-ordination of efforts to mutual benefit, particularly through such as Health Improvement Programmes and Health Action Zones.

- **Promote the recreational and leisure uses of cycling and identify suitable leisure routes.**

Many people start cycling as a leisure activity. This needs to be developed so that more people are encouraged to use cycling as an everyday mode of transport.

Measures will include signing of leisure facilities and cycle routes and the organising or promoting of events and initiatives.

- **Publicise the cycle route network and other facilities and emphasise the health, social, financial and environmental benefits of cycling.**

People need to be made aware of both transport and leisure cycling facilities and the benefits to be gained from cycling, particularly the health benefits. Negative attitudes towards cycling need to be changed. One way to help achieve this will be through the production of maps and information leaflets for distribution to the public.

Cycling can also be promoted through such as health and environmental campaigns. National campaigns such as National Bike will be supported.

- **Work with the Police in the reduction of cycle theft and encourage the use of cycle security measures.**

The fear of theft is one of the reasons why a number of cyclists will not leave their cycles unattended and so will not use them for utility journeys.

## **Education**

- **Provide or enable on and off-road cycle training for children of appropriate age and ability.**

Safety is paramount and it is essential that children are trained in the safe handling and control of cycles, coping with highway conditions and traffic awareness. On-road training is an important part of initiatives to increase the number of journeys to school made by cycle.

If sensible leisure use of cycles is to be increased, education is also needed in off-road leisure cycling, country code, cycle maintenance, legal rights and controls

If attitudes to transport are to be changed and more sustainable choices encouraged, the education of children in safe cycling will be a key activity.

- **Provide or enable education and training for young people, adults and family groups of cyclists.**

Education should not just be limited to children; older people also have a need for cycle training. Local cycling organisations may be able to play a part.

- **Promote and support initiatives aimed at improving the interaction between cyclists and other road users and so create an environment more conducive to safe cycling.**

A significant deterrent to cycling is the perception of danger and intimidation to cyclists caused by the inconsiderate and sometimes aggressive behaviour of some drivers.

Cyclists and motorists have to co-exist on the highway. Initiatives are needed to make both cyclists and motorists more aware of each others' needs, for example through instruction for the Driving Test, Advanced Driving courses, cycle training courses and publicity.

## **Enforcement**

- **Support the Police in effective enforcement of road traffic law to benefit cyclist safety.**

This covers such things as motorists' excessive speed, dangerous driving and illegal parking and cyclists' use of lights, riding on footways and conformance with traffic signals and signs. Effective enforcement is considered an essential component of efforts to influence driver behaviour, which is a significant barrier to the regeneration of cycling.

## **MONITORING AND REVIEW**

17. Regular monitoring of cycle use, injury accidents involving cyclists and reported cycle theft will be undertaken. The results of the monitoring will be used to guide the programme of infrastructure development and the progress being made towards achieving the objectives and targets. Reviews of progress will be made in the Annual Progress Report, which forms an integral part of the Local Transport Plan. The action plans, programmes and priorities will be amended as necessary to meet the targets.

18. Cycles are included in all manual traffic counts. Regular counts will be carried out at selected sites and studies will be undertaken before and after the implementation of



cycling projects. The impact of cycling projects, the effectiveness of cycle training programmes and the trends and distribution of reported cyclist casualty accidents will be monitored.

29. Consultation will continue to take place with cyclists, local cycling groups and the Police on the design of proposals and the effects of installed measures.

## **RESOURCES**

20. Adequate staffing levels and expertise to meet the demands of the Strategy will be provided. Opportunities will also be taken to involve other agencies, where appropriate.

21. Funding will be sought for the implementation and maintenance of cycling facilities.

22. There are many potential sources of funding available including Government Grants and spending approvals, Lottery funds, sponsorship and partnership with other organisations.

## **WEST YORKSHIRE WALKING STRATEGY**

### **INTRODUCTION**

1. Walking has always played a key role in local transport. It is so much a part of people's daily routine that it is often taken for granted. More and more people, however, are using their cars rather than walking for relatively short journeys; but more road traffic makes walking unpleasant and unsafe, leading to a vicious circle of decline. The dispersal of land uses, employment trends and fears about personal security have also contributed to the decline. This trend needs to be tackled if problems of traffic congestion and pollution are to be avoided. Encouraging people to walk and use public transport rather than travel by car will make an important contribution to managing travel demand and have wider benefits to the community, the environment and the health of the people of West Yorkshire.

2. This document sets out the West Yorkshire Authorities' Walking Strategy. The Strategy sits within the overall framework of transport policies for West Yorkshire provided by the Local Transport Plan and complements the findings of the West Yorkshire Public Transport Accessibility Study completed in early 1997. The policies set out in this Strategy and the Plan have been developed within the principles provided by the DETR advice on encouraging walking, Unitary Development Plans and other local policies for regeneration, the environment, health and education.

3. The Strategy seeks to maintain, encourage and develop the role of walking to reduce dependence on the private car and increase opportunities for independent mobility by children and people with disabilities. Through this Strategy and the proposed local action plans for each district area, steps will be taken to provide more practical support for pedestrians for both utility and recreational walking purposes.

4. Whilst highway footways are probably the most prominent part of the pedestrian route network, footpaths, bridleways, the canal towpath and other public rights of way are also considered an essential element of this network. West Yorkshire has a large rural hinterland and these routes have special value in providing links within and between outlying settlements. As such, existing and future Milestones Statements for the management and development of these rights of way are an integral part of the West Yorkshire local authorities' walking policies. With canal tow paths, especially in urban areas, there is the potential to connect into the existing footpath and the public transport networks because these towpaths connect well with some train and bus routes and can be accessible from stations and the main roads.

### **PROBLEMS AND ISSUES**

5. Walking is a popular mode of transport in Great Britain. The Government's National Travel Survey (NTS 1993/95) shows that it accounts for nearly one third (29%) of all journeys, including 82% of journeys less than a mile; and in mileage terms 3% of distance travelled. The NTS also show that walking declined from 35% of all journeys made in 1975/76 to 29% in 1994/96; the average distance walked, per person, has fallen by 20%. Walking has declined as car availability has increased. Comparison of the West Yorkshire Household Travel Surveys, carried out in 1981 and 1991, shows an increase of 13% in car trips. The main proportion of this increase has been at the expense of walking, where there has been a decrease of 11% (from 37% to 26%).

6. Walking has obvious limitations for replacing longer journeys but research has shown that most journeys are very short and ideal for walking. The NTS (1989/91) shows that almost a third of all journeys under 2 miles are made by car and even for the shortest journeys (those under half a kilometre) 6% were made by car. This shows there is potential for increasing journeys made on foot by converting these short distance car journeys to walking journeys.

7. Walking is environmentally friendly and healthy, but can be inconvenient and not well catered for. There are a number of deterrents, which need to be addressed if people are to be encouraged to make more journeys on foot:

- road safety, especially the risk of injury to children;
- personal security, particularly for women, children and older people;
- inadequate facilities, especially for people with impaired mobility;
- linkages to public transport, which are often perceived as being poor;
- inadequate provision of local facilities and services;
- heavy and fast moving traffic;
- poor roadside environments, often suffering from noise and air pollution.

8. A higher priority for walking in the transport system will assist in addressing these problems. It is essential to plan positively for pedestrians to create conditions most likely to produce a shift in attitudes and travel patterns. The importance of walking needs to be recognised by investing more in safe and pleasant walking routes to enable people to walk without feeling threatened or overwhelmed by traffic. Increased safety and convenience will allow walking to be promoted as a healthy and environmentally friendly alternative way of travelling for short journeys.

9. The lack of adequate physical exercise by a large proportion of the population is a serious cause for concern for health providers, and may lead to a greater call on health service resources in the future. Walking is a healthy mode of travel and walking can be an important form of physical exercise.

## OBJECTIVES

10. The objectives of the West Yorkshire Walking Strategy are to:

- **increase the proportion of journeys undertaken on foot** especially by achieving a transfer from private car use;
- **emphasise the role of walking as part of journeys by public transport;**
- **improve the walking environment** to make walking more attractive by enhancing safety, security and environmental quality;
- **promote walking** as a practical mode of travel with benefits to health, the environment and the community;
- **make it possible for more journeys to be made on foot by people with impaired or reduced mobility;**
- **ensure that actions to encourage walking and cycling complement one another** to realise opportunities for achieving more sustainable local travel patterns.

## TARGETS

11. To measure progress in implementing the strategy and the achievement of its objectives, the following targets are proposed:

- Target 1** to increase the pedestrian's share of journeys to work from 11% to 15% by 2006;
- Target 2** to increase the pedestrian's share of journeys to school by 5% by 2006;
- Target 3** to achieve a reduction of 50% in the numbers of pedestrians killed and seriously injured by 2010; with early attention, we aim to achieve a reduction of 40% by 2005. Our overall intention is to continue to reduce all injuries to pedestrians including slight injuries;
- Target 4** to achieve a network of footways and pedestrian facilities that is accessible to disabled people and meets pedestrian journey needs by the most direct routes;
- Target 5** to increase the number and range of services and facilities located within convenient walking distance of the home or workplace (typically a journey of 15 minutes duration or 1km in distance).

## STRATEGY

12. Walking is not simply a transport issue; there is a considerable overlap with other issues, notably health and policing, which have an important bearing on walking policy. A co-ordinated approach is essential and the West Yorkshire local authorities will build on existing links with the appropriate agencies through the implementation of Local Action Plans. The measures that form the basis for implementing this Strategy and delivering its Objectives are divided into the areas of: planning; engineering; encouragement and education; and enforcement.

### *Planning and Development*

13. Effective planning of the transport system and of development and land use patterns is instrumental to realising the objectives of this Strategy. These twin processes will ensure that infrastructure improvements complement land use planning policies, to encourage forms of development that are readily accessible by pedestrians and overcome barriers to walking.

- **Manage and improve the existing network of footways and public rights of way to achieve continuous walking links throughout urban areas.**

The existing public highway meets the majority of walking journey requirements within urban areas. However there are deficiencies which may deter people from walking. The aim is to meet pedestrian expectations by upgrading sub-standard footways and lighting systems to meet modern standards, providing missing network links where necessary. Maintaining footpaths and other public rights of way is an important aspect of this process.

- **Maximise the use of the most attractive walking routes by the development and implementation of effective signing strategies.**

Most journeys are made in local areas, familiar to the user, where signing is unnecessary. However, where routes are unattractive, perhaps due to a poor roadside environment, there is scope for developing and signing alternative pedestrian routes away from busy roads. Signing is especially advantageous in visitor and tourist areas such as town centres. Direct and attractive footways can be used to create routes between key locations, with links to public transport services.

- **Use the planning process to stimulate a growth in walking and ensure that pedestrian access is a primary consideration in developments.**

Reducing the need to travel, especially long journeys, is emphasised in national planning guidance and in the future a greater variety in the character and scale of urban development is likely. Better conditions for pedestrians, when linked to locational policies which promote local activity, could encourage more people to walk. In considering development proposals, the issues associated with pedestrian access and links to public transport will continue to be taken into account. Further details of how we will use the planning process to encourage walking are provided in the separate Local Transport Plan Land Use Planning Annex.

- **Take a co-ordinated approach to tackling issues of community safety especially where personal security is a deterrent to walking.**

Where fears about safety and security are identified as a deterrent to walking. Solutions which restore public confidence will be sought in conjunction with the community. Similarly, personal security issues will be a major consideration in the design of new developments.

### ***Engineering***

14. Highway and traffic engineering measures are central to the provision of facilities to improve the safety of pedestrians and cater for their travel needs. We will use the “Hierarchy of Consideration” contained within the main Local Transport Plan to ensure that the needs of people walking are considered first as part of the design process.

- **Provide measures to aid pedestrians when crossing roads wherever the volume of pedestrians and conflict with traffic justifies it.**

There are established techniques for aiding pedestrians and mitigating conflicts with motor traffic and cyclists by providing crossings, refuge islands, road narrowing etc. These measures are likely to remain among the most practical ways of facilitating the safe movement of pedestrians across roads. More attention needs to be placed on reducing traffic related delays to pedestrians and increasing their precedence over traffic.

- **Continue implementing Local Safety Schemes to reduce injuries and improve the general road safety of pedestrians.**

The introduction of measures to reduce road accident injuries to pedestrians is a priority. This action is co-ordinated through district council Road Safety Plans, with particular emphasis on reducing injuries to children. These measures will make pedestrian journeys safer by addressing the key issue of exposure to accident risks.

- **Introduce measures to reduce the speed and volume of traffic to reflect local pedestrian needs and activity.**

Pedestrianisation and traffic management schemes are being widely used in the town centres of West Yorkshire to remove or reduce traffic and create pedestrian dominated environments. In residential areas traffic calming techniques are being extensively used to reduce the impact of traffic speeds and flows on road safety and pedestrians. Further development of these techniques may offer opportunities for creating pedestrian priority areas on new and existing residential roads.

- **Establish Safer Routes to Schools projects to encourage children to walk or cycle to school by improving the road environment and their road user skills.**

There is significant ongoing transfer of school journeys from walking to car travel. If this continues there are serious adverse implications for children's health and personal independence. In order to reverse this trend, measures to improve the safety of roads on routes to schools for pedestrians and cyclists are proposed, in conjunction with programmes to improve individual road user skills.

- **Ensure the highest standards of design are observed in the provision of facilities which should be accessible to all pedestrians.**

The principles of good design for pedestrians, especially those with reduced mobility, are well established. The appropriate technical guidelines will be applied to ensure new facilities and improvements are of a high quality, which meets the needs of disabled people.

- **Ensure that best practice is observed in the care and maintenance of the footway and pedestrian route network.**

Footways and pedestrian facilities need to be well maintained in accordance with the local authorities code of practice. During construction works inconvenience to pedestrians will be minimised by ensuring that the relevant guidelines are correctly applied in the planning and execution of the works.

- **Implement audit procedures to ensure that good practice is applied to the design and implementation of pedestrian measures.**

Audit procedures are a valuable and effective means of ensuring the consistent application of best practice in the design and implementation of pedestrian measures which are safe and accessible. At the same time scheme audits provide a check that proposals are meeting policy objectives and achieving the desired intentions.

### ***Education and Encouragement***

15. Over 60% of households in West Yorkshire have one or more cars and many individuals and families are now accustomed to car orientated lifestyles. Therefore a vital part of the walking policy process is involvement with local communities in the provision of education and information about the advantages of walking. This is especially relevant to children whose lifestyle is shaped by their parents' habits.

- **Work with health services to raise awareness about the benefits to health and lifestyle that can be gained from walking.**

The personal and community benefits of walking need to be widely promoted. As well as being healthy it is an environmentally benign mode of travel which can enhance personal and community life. Increasing the pedestrian use of streets will foster

greater social interaction, thereby helping to relieve fears of isolation and insecurity, which will encourage more people to walk. Future initiatives will include practical support for changes to travel through initiatives such as Walk to School Week and TravelWise. Walking is also an important source of physical exercise in which most people can take part. Increased levels of exercise can have a major impact on public health.

- **Develop targeted initiatives to encourage walking most especially by young people.**

Encouraging sustainable travel habits among young people is a key issue. For young people the most frequent journey is to school or college and this is being targeted through Safer Routes to School projects which combine both education and engineering measures. Projects which facilitate children's independent mobility, and encourage young adults to continue to walk or cycle rather than aspire to own their own car will continue to be developed.

- **Use the opportunities presented by road safety education to positively influence attitudes of other road users towards pedestrians and walking.**

Our commitment to publicising road safety issues and training and educating road users is very well established. These responsibilities will be further developed and integrated with actions to encourage the environmentally benign travel modes of walking and cycling.

### ***Enforcement***

16. Pedestrians are concerned about driver behaviour and standards. Road traffic and highway laws and regulations provide a strong legislative framework protecting pedestrian interests. Compliance with legislation benefits all road users and can be accomplished by effective enforcement by the Police and local authorities.

- **Support the Police in their enforcement to address bad driving which deters walking and is hazardous to pedestrians.**

Aggressive driving and a disregard for the safety of other road users is of serious concern to pedestrians. The Police are responsible for road traffic law enforcement. The local authorities can assist with measures which ease this task by providing good signing, together with traffic calming and camera facilities where necessary.

- **Work with the relevant agencies to ensure that footways and pedestrian facilities are free of parking and other hazards.**

The obstruction of footways by parking, unauthorised street furniture or poorly planned road works causes special difficulties, especially for people with impaired vision, in wheelchairs or with pushchairs. The local authorities will continue to enforce the regulations and support intervention by the Police.

### **IMPLEMENTATION**

17. This Strategy sets out the basic principles of policy agreed by the district councils in West Yorkshire. The process of implementing the Strategy will be set out in the specific local **Action Plans** to be prepared by each authority. These Plans will be

reviewed every three years and will outline a programme of local pedestrian measures and initiatives, some of which are already in process. The Plans will also identify appropriate links with local communities and pedestrian groups and with the agencies who can play a role in encouraging walking and supporting pedestrians.

### **Resources**

18. There are a number of funding sources available for implementing this Strategy. For infrastructure related measures the main source of capital funding is the Local Transport Plan bidding process. Complementary capital funding will be determined locally by individual authorities within the framework of their Action Plans, as will revenue expenditure for education, publicity, and travel awareness initiatives.

19. Local Transport Plan funds will be used principally to develop schemes that take an integrated approach to meeting travel needs. Due regard will be given to making provision for pedestrians within all transport schemes and, within the resources allocated, a portion of the overall budget will be made available for specifically pedestrian related measures.

20. In the future, a larger allocation of funding for the Plan will be sought in order to expedite the implementation of this Strategy. The development of flexible funding mechanisms capable of covering all aspects of the sustainable transport process will be supported. For example through such mechanisms we will be seeking to develop an integrated approach to the financing of the engineering, training and publicity aspects of projects such as Safer Routes to School and the introduction and operation of speed and red light cameras.

21. Where appropriate other potential sources of external funding will be pursued. In particular, where new developments are proposed, steps will be taken to maximise potential contributions to the cost of new and improved pedestrian routes.

### **Monitoring**

22. Steps are being taken within the overall transport monitoring process to establish consistent baseline data with which to measure progress. In the future further work to collect more detailed information about personal travel preferences and attitudes will take place within this framework.

23. Expanding and developing data collection and analysis will provide the opportunity for a closer examination of the aspects of travel behaviour related to walking. This will allow more meaningful analysis of the data, which can be used to inform the development of future projects to encourage walking.

24. Progress will be presented to the Government as part of the process of reporting local transport policies and expenditure plans, through the Local Transport Plan and future Annual Progress Reports. In addition the local authorities will also work to ensure that relevant information is available locally.



## **WEST YORKSHIRE ROAD SAFETY STRATEGY**

### **INTRODUCTION**

1. The West Yorkshire Road Safety Strategy has been prepared as an integral part of the West Yorkshire Local Transport Plan which seeks to achieve a better, more integrated transport system - leading to less congestion, less pollution, more transport choice, and less dependency on the car. It is consistent with the aims of the National Road Safety Strategy published in March 2000 and considers the information needed to carry out a child safety audit.
2. The West Yorkshire Road Safety Strategy deals with the safety issues of transport choice in West Yorkshire and the particular local circumstances relating to specific road user groups, especially those most vulnerable to road injuries, for example children and elderly people, pedestrians, cyclists and motorcyclists. The local authorities, the Police and other agencies in West Yorkshire have worked together with local people in recent years to reduce injuries in line with the DETR guidelines.
3. Working in partnership, it has been possible to meet many of the targets for the year 2000 established under previous national road safety initiatives, which were set against average casualty figures for the 1981 to 1985 five-year period. This work is being continued and expanded in line with national priorities to maximise the opportunities for transport choice and casualty reduction. The base line for future activity and targeted reductions in road injuries is the average casualties/year in the 5-year period 1994-1998 as set out in Tomorrow's Roads Safer for Everyone.

### ***Support for national initiatives***

4. This Strategy has been developed with close attention to Tomorrow's Roads – Safer for Everyone, the new national road safety strategy, which has provided the template for future local action to improve the safety of West Yorkshire's roads. It has prompted new and concentrated attention to be given to road safety and through its 10 themes it has given specific direction to the key aspects of safety management most especially a focus on appropriate speed. These will be key factors in allocating resources and working together with local people to reduce fatal and serious injuries.
5. The work that is being carried out in West Yorkshire and which is reflected in this Strategy mirrors these key themes from the national strategy, particularly in the setting of targets for 2010, which are closely aligned to those that we have set ourselves. The emphasis on child safety is welcomed and again in West Yorkshire the local authorities have concentrated for a number of years on the reduction of injuries to children, with some success. Child pedestrian casualties in West Yorkshire have fallen to their lowest levels in recent years.

### **AIMS AND OBJECTIVES**

**The prime and focused aim of the West Yorkshire Road Safety Strategy is to make a significant and sustained reduction in the fatal and serious casualties brought about by road injuries.**

6. The three Aims of the Strategy emphasise the importance placed on integration and co-ordination that is needed to improve road safety and recognises the contribution which local people make. Our aims are:

- To enable local people to promote and be involved in the identification of road safety concerns and the progression of initiatives to reduce road injuries.
- To promote an environmental change which gives mobility, travel choice and travel safety
- To achieve a "safety" culture where everyone recognises the need to travel responsibly.

7. In order to meet these Aims we have set Objectives to reflect the inter-agency and partnership approach which is necessary to deliver future improvements to road safety. These objectives incorporate activity within the tradition areas of road safety education, engineering and enforcement together with the increasing need for encouragement to consider wider travel issues and the key aspect of developing effective partnerships for change.

8. The Objectives are:

- Change the road environment in such a way that it is both seen to be, and actually is, a safer place for all classes of road users particularly those most vulnerable - pedestrians, cyclists, motorcyclists and horse riders.
- Equip all road users with the skills and information needed to travel safely in regard to their own and other road users' safety.
- Involve a wide range of people and organisations in the process of developing an appropriate road environment and a responsible culture to improve safety and the quality of life.

9. The West Yorkshire Road Safety Strategy is supported by action plans from the 5 Metropolitan Districts, the Police strategy document - "Joining Forces for Safer Roads" and Health Action Plans developed from the Government White Paper - "Our Healthier Nation" and, also, through community safety initiatives.

## **ROAD CASUALTIES IN WEST YORKSHIRE - THE BASELINE POSITION**

10. West Yorkshire Police road casualty records have been used to assess the baseline position of this Strategy and calculate the necessary average figures required to monitor future progress. Using this data for the period 1994 - 1998 inclusive, gives average annual figures which show a total of 12,876 casualties, including 115 deaths and 1369 serious injuries.

11. There has been a steady decline in the number of fatal and serious injuries for a number of years but, in common with many other areas, this has been accompanied by a continuing rise in slight casualties. In 1999, however, it was encouraging to see a small but significant reduction in the number of slight injuries by 791 to 12,340.

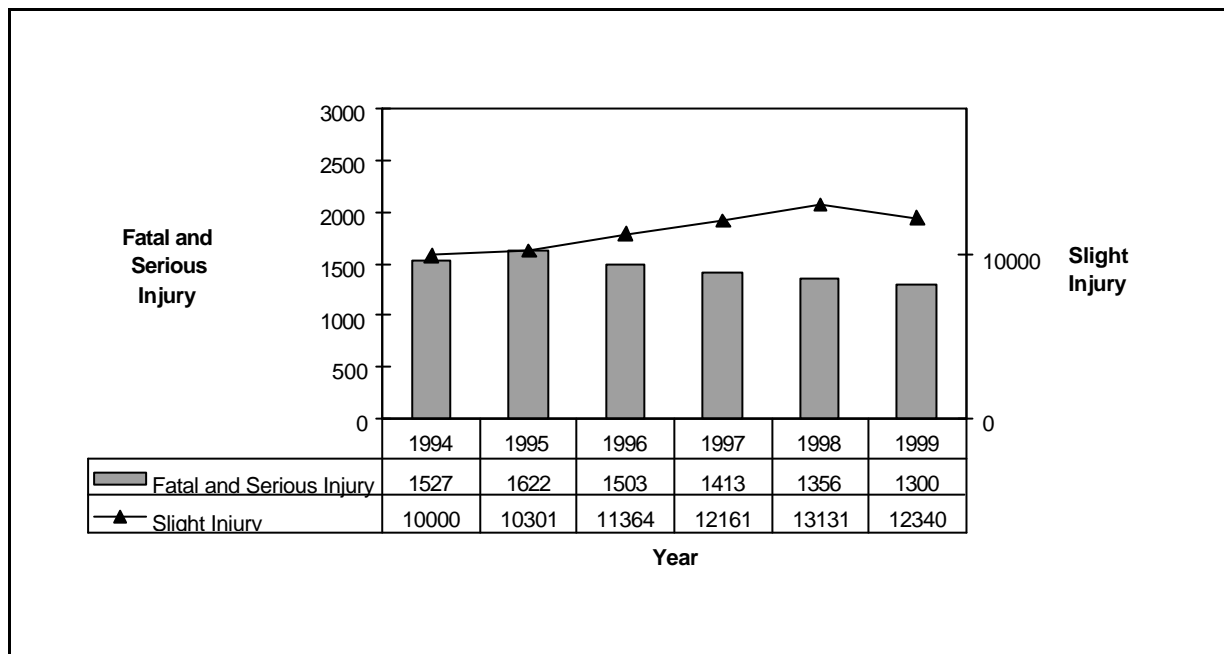
12. In 1999 the main road user groups sustaining fatal and serious injuries were in the following categories :-

- 433 pedestrians (33%)
- 74 pedal cyclists (6%)
- 205 motorcycle users (16%)
- 326 car drivers (25%)

- 201 car passengers (15%)

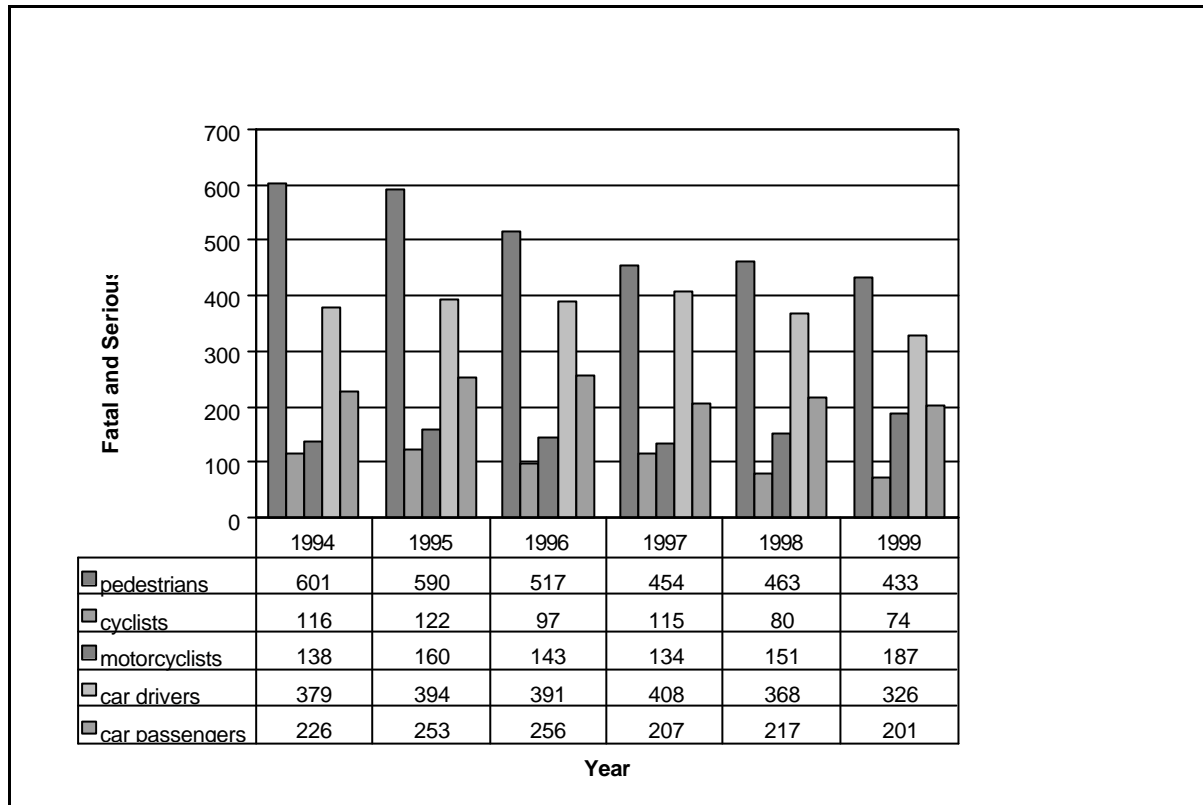
13. Other groups represented in the total figure of 1,300 injuries are hackney carriage/ private hire drivers and passengers, goods vehicle occupants, emergency services vehicle users, public service vehicle occupants, horse riders and others. Whilst injuries to horse riders and collisions involving ridden horses are in relatively low numbers, their inclusion indicates a need to consider the safety issues around horse riding and to make adequate provisions to make horse riding safer.

14. Summary casualty information is given for individual years from 1994 in Charts 1 and 2.



*Chart 1: West Yorkshire Road Casualties*

15. In the period from 1994 to 1999 fatal and serious casualties fell by 14% to 1300 whilst slight injuries rose by 23% to 12340



*Chart 2: West Yorkshire Road Casualties – Fatal and Serious Injuries*

16. There is an overall reducing trend in fatal and serious injuries in most user groups. Deaths and serious injuries for, pedestrians, pedal cyclists, car drivers and car passengers have fallen by 28%, 36%, 14%, and 11% respectively between 1994 and 1999. Figures for motorcyclists show an increase of 36% in the same period. This very significant increase is the subject of an ongoing study

### **Child injuries**

17. In the 1994-98 baseline period, the average number of fatal and serious injuries to children aged 0-15 years were in the following categories:

- total injuries 273;
- pedestrians 187 (69%);
- pedal cyclists 41 (15%);
- car passengers 35 (13%).

18. Also, on average there are 2 fatal or serious injuries to motorcycle riders and 1 such injury to a child driving a car. This is clearly indicative of a persistent problem of under age and illegal use of motor vehicles.

19. During 1999 1,939 children were injured on West Yorkshire's road, including 10 fatalities and 233 serious injuries. These accidents were in the following main categories and severities:

- pedestrians 906 (20% KSI);
- pedal cyclists 272 (10% KSI);

- motor vehicle occupants/riders 754 (4% KSI).

20. At the local level information is available at a much greater level of detail and this information is being used to direct child casualty reduction measures to the greatest effect.

### ***Factors in Road Injuries***

21. Over a number of years, the most common factors in road injuries have been driving too fast, driving too close, turning right injudiciously, misjudged speed and distance, and overtaking injudiciously. Whilst some of these factors can in part be addressed through engineering measures, these factors do act to emphasise the need for measures which can successfully influence drivers behaviour and response to road conditions and the presence of other road users.

### ***Other sources of data***

22. Ideally we would wish to supplement the data recorded by the Police at the casualty site. We have, however, concluded that it would be impractical to include data on hospital admissions for road related injuries due to the difficulty in collecting and analysing the data in manner which would provide sufficiently robust and useful data. We are, however, satisfied from previous experience that the recorded data provides a robust and consistent means for identifying the main road safety concerns in West Yorkshire and that this distribution provides a proxy for other injuries which may go unreported.

23. Whilst evidence from research elsewhere leads us to believe that there may be some element of under-reporting particularly of slight injuries, we are confident that our reliance on the STATS19 data provided by the police is soundly based and that it provides adequate representation of the scale of road safety problems in West Yorkshire comparative to elsewhere in the U.K.

## **TARGETS - REDUCING ROAD INJURIES**

24. As the previous section has indicated there are a very substantial number of road injuries occurring in West Yorkshire. This section therefore outlines the targets which the local authorities have jointly agreed as being appropriate for the West Yorkshire area. They have been defined after careful consideration of both current data, past trends and also in the light of the authorities collective past experience of casualty reduction activity. In this respect they have both been chosen to be challenging but at the same time with an element of realism such that we believe with the right level of support from the Government, Police and public they can be achieved.

### ***National targets to 2010***

25. The national road safety target reductions to 2010 are based on the average annual casualties in the 5-year period 1994 to 1998. The headline target reductions adopted for road injuries in West Yorkshire, consistent with national guidelines, are:

- a 40% reduction in the numbers of people killed and seriously injured;
- a 50% reduction in the numbers of children killed and seriously injured;
- a 10% reduction in the rate of slight injury, expressed as the numbers of people

slightly injured per 100 million vehicle kilometres travelled.

26. In addition, we aim to achieve a reduction of 50% in the numbers of pedestrians killed and seriously injured. With early attention, we aim to achieve a reduction of 40% by 2005. Our overall intention is to continue to reduce all injuries to pedestrians including slight injuries.

27. With respect to our targets for slight injuries it is necessary to commission further work to ensure that we are able to effectively monitor this against the traffic flow data collected in West Yorkshire. Further work on this issue and the subsequent definition of the targets will be reported in future Annual Progress Reports.

28. The target reductions will be supported by specific co-ordinated actions and by more detailed target reductions guided by local circumstances in West Yorkshire.

### **Baseline Indicators**

29. The key performance indicators are summarised below. A full breakdown of the road safety targets for this Strategy is provided in Annex 2 attached to this document.

	All fatal and serious injuries	All slight injuries	All child casualties
Base (1994-98)	1484	*	2004
to 2005	1187	*	1504
to 2010	890	*	1002

*Table 1: Baseline Indicators*

\* Figures to include casualty rates based on traffic flow, awaiting additional National Traffic Census data from DETR

### Milestone Indicators

30. In order to assist in the measurement of progress Milestone Indicators for the period 2000 to 2005 have been prepared in accordance with our 5-year plan and consistent with longer term target reductions to 2010.

Year	Baseline	2000	2001	2002	2003	2004	2005	2010
All fatal/serious injury	1,484	1263	1226	1189	1152	1115	1078	891

*Table 2: All fatal and serious injuries (Target total reduction 40%)*

Year	Baseline	2000	2001	2002	2003	2004	2005	2010
All fatal/serious injury	272	233	224	214	205	195	185	136

*Table 3: Child fatal and serious injuries (Target total reduction 50%)*

### **Monitoring**

31. Whilst clearly the core indicators for change will be based on the reported casualty records, we are also committed to the development and use of appropriate additional indicators. Such additional indicators will take the form of additional transport data which can act as supplementary proxies for the overall level of road danger.

32. The programmes of Local Safety Scheme implemented since specific Government funding was made available for this activity have been extensively monitored and for the most recent five year period details of individual scheme performance are included in the Local Transport Plan Annual Progress Report.

33. The additional indicators, which we will seek to develop and subsequently report in Annual Progress Reports, are as follows:

- Observed vehicle speeds at specific points;
- Changes in the number of drivers exceeding speed limits;
- Indicators of change in driver behaviour, which may include: -
  - seat belt wearing;
  - traffic light violations;
  - speeding offences;
  - drink drive and drug related convictions;
  - observed use of mobile phones etc.

## **IMPLEMENTING THE STRATEGY**

34. The road safety working practices which have developed over many years in West Yorkshire underpin the activities which will be pursued to continue to address the Strategy's three core aims.

35. These activities fall into three areas: Community - ensuring participation and involvement; Road environment - making physical improvements; and Safety culture - influencing opinions and behaviour. In each section we have underlined our commitment to improving safety with details of some of the broad range of initiatives which are being undertaken or are proposed during the life of this strategy. These initiatives are the key to delivery of the Strategy objectives.

### ***Community - developing partnerships and ensuring participation***

36. The involvement of local people, including local road safety committees, in road safety issues is a priority in West Yorkshire and is secured in many ways through the media, neighbourhood forums, consultation groups, district road safety action plans and policing plans, and through leafleting and public meetings. This involvement is underpinned by the partnerships we have established for the delivery of road safety education, training and programmes in each District area within which the key partners are the Police, Health Authorities and local education departments and schools. An essential part of this is an effective process of liaison with all interested parties to ensure that new initiatives are built on sound foundations of ownership and participation. Key measures which address our objectives include:-

- The development of effective partnership working arrangements with key agencies including the Police, Metro and public transport operators, Health Authorities and Healthcare Trusts.
- Co-operation at the West Yorkshire and regional level between road safety practitioners to ensure the effective implementation of local and national campaigns and share experience to ensure that a best practice approach is adopted for the

delivery of new initiatives, including participation in the regional promotions group.

- Participation in travel awareness initiatives such as Walk to School Week and support for measures which facilitate adoption of healthy and sustainable travel patterns. Regionally 250,000 children have been involved in such events in the past.
- Work through the establishment of local multi-agency groups such as the Child Accident Prevention Groups operating in Calderdale and Wakefield Districts and similar groupings in other Districts to address broader issues of safety.
- Developing links with local communities, such the well-established Neighbourhood Forums in Bradford and in other Districts, to ensure that programmes reflect local concerns and respond with strategies and measures which effectively address safety issues.
- Continuing development of work in schools and with other groups to provide road safety advice and information, for example an ongoing publicity advice campaign for students travelling in the A660 corridor in Leeds and similar initiatives elsewhere.

### ***Road Environment - Changing Physical Features***

37. This environmental change is promoted throughout West Yorkshire, in response to the occurrence and nature of road injuries, to reduce conflict and to prevent death and injury. We recognise community needs, awareness of road safety, and correct behaviour as essential elements in successful environmental change. Casualty reduction measures based on road safety engineering are discussed and agreed with community representatives and amended as necessary to meet local circumstances.

38. The content of Local Safety Schemes programmes has gradually evolved to address issues in residential areas and to target low-cost and effective casualty reduction measures that are of particular benefit to local communities and pedestrians and cyclists. There is however a continuing concern about the significant number of injuries which occur on major roads and at major junctions.

39. Over many years a very considerable investment has been made in cost effective casualty reduction measures at many of these location. This investment has successfully stabilized the casualty rate at many locations, but continuing increases in traffic flows and changes in local conditions have frequently necessitated consideration of additional measures. Often this entails a fundamental review of the site, particularly where junctions are concerned and as such remedial measures at those locations generally have significant cost implications. Increased resources will need to be allocated to investigation and identification techniques to continue a programme of low-cost measures, but increasingly safety aspirations will need to be combined with more substantial infrastructure projects to meet the overall target reductions. A number of such sites are included in the Local Transport Plan programme.

40. Whilst Local Safety Schemes are the main direct measure for improving the safety of the highway, road safety is promoted in all transport improvements through attention to design standards, community needs and safety audit procedures. Key measures which address our objectives include:

- The continuation of detailed analysis and study of road safety injury records supported by specific local research, covering the following areas:
  - in-depth investigations on a site or route specific basis to direct and inform



- remedial action to the greatest effect;
- progression of community safety audits with sharing of information to identify road safety needs and priorities;
- the application of good practice in the investigation and design of remedial measures including the techniques applied through adoption of Urban Safety Management;
- conduct of formal safety audits on all new highway schemes in accordance with DETR and IHT guidelines.
- Local Safety Schemes to introduce cost effective improvements with significant casualty reduction benefits, achieved through:
  - implementation of targeted programmes at sites with known casualty records using proven measures known to result in reduced road injuries;
  - schemes designed to alter the road environment to reduce conflict and to control speeds within a co-ordinated approach to education, training and publicity and supported by the Police;
  - past investment has been approximately £2.5 million per annum and has shown overall First Year Rates of Return in the order of 300 - 400%;
  - attention to the needs of pedestrians, cyclists and disabled people when considering new schemes together with the views of local residents and businesses.
- Speed Management is an integral part of the Strategy. Appropriate speed is the key to improved safety, and developments in speed management in West Yorkshire will progress with local communities alongside the emerging national guidance and legislation on setting local speed limits and on the creation of a road hierarchy. The adoption of safer driving behaviour is being promoted by a number of key actions:
  - recognition that excess speed is a major factor in a significant proportion of crashes in West Yorkshire and that the adoption of a suitable speed management strategy is essential to address rising casualty numbers and increasingly inappropriate driver behaviour;
  - direct speed reduction will continue to be achieved through the application of traffic calming and other speed reduction measures implemented through both Local Safety Schemes and Integrated Transport programmes;
  - measures to enhance the Police's enforcement capabilities through the application of camera technology, especially on major roads where other engineering techniques are less appropriate;
  - through the review and future development of the existing speed limit hierarchy throughout West Yorkshire to establish a more consistent basis for the review and adjustment of speed limits as part of the overall package of casualty reduction measures;
  - the co-ordination of speed limit reviews and changes with local publicity and targeted police enforcement.
- Traffic calming schemes will continue to be implemented on both site specific and

area wide bases and these measures will be supported with education, training and publicity. Measures will include:

- continued introduction of area wide 20 mph zones in locations with high casualty rates and vulnerability for children and pedestrians;
  - route traffic calming measures and speed reduction measures on “lengths of road for concern” particularly in residential areas and other locations with high levels of street based activity.
- Road safety engineering measures within general improvement schemes, these will be directed at:
    - appropriate use of measures to improve safety as part of junction improvement schemes and to reduce conflict between the various groups of road users making use of traffic signal and co-ordination techniques as appropriate;
    - the careful integration of appropriate safety measures in all transport improvement schemes;
    - ongoing review of street lighting standards, making improvements where necessary to provide levels of illumination that reduce the incidence of lighting related collisions and also provide enhanced levels of personal security;
    - the appropriate use coloured and/or skid resistant road surfacing;
    - the use of “gateway” measures at the entrances to towns and villages and also at appropriate locations in urban areas where the character of the road changes substantially such that it warrants significantly different behaviour on the part of drivers;
    - provision of suitable facilities to promote the safety of all users, for example adequate crossing facilities for pedestrians, cyclists, and ridden horses.
  - Effective use of the planning process to ensure best practice in the design of new developments is being applied across West Yorkshire, by:
    - taking on board the principles outlined Planning Policy Guidance and adopting the principles underlying the draft Regional Planning Guidance and Transport Strategy for Yorkshire and the Humber;
    - the development of local design guides and aids for developers and designers which incorporate the principles of sustainability and safe movement, such as the Sustainable Development Design Guide adopted in Leeds;
    - ensuring that within the planning process full account is taken of the wider safety issues arising on the road network adjacent to developments and seeking appropriate recognition of these issues in the planning obligations of developers;
    - the inclusion of travel plan requirements within planning agreements for significant new developments, including schools, with provision for measures which address the safety and security issues associated with the adoption of more sustainable travel behaviour.

### ***Safety Culture - influencing opinions and behaviour***

41. A safety culture is implicit in the work done to make people aware of their

responsibility for the safety of others and of themselves and, of their responsibility to community life that has suffered through the effects of increased traffic volumes and inappropriate traffic speeds. It is promoted through all our agencies and encompasses particularly, education, training, health and enforcement issues. The central purpose of these activities is to extend the skills, knowledge and understanding of all road users and thence to increase the levels of competency amongst road users however they travel. We are seeking to do this by:

- Measures to improve road user skills training through:
  - the further development and expansion of pedestrian training, cyclist training and pre-driver training programmes for children and young people which are already provided at varying levels in West Yorkshire to increase young people's ability to make real choices about how they travel;
  - continuing to ensure the ownership of parents and guardians, teachers and governors in child safety initiatives to enable constructive partnerships to be built through which to deliver initiatives;
  - the development of a standardised approach to cycling training schemes for the West Yorkshire area;
  - continuing support for the West Yorkshire driver improvement scheme with further extended availability as a positive alternative prosecution in appropriate circumstances.
- Preparation and promotion of road safety through District Action Plans setting out the specific local initiatives that we will pursue, support for the West Yorkshire Policing Plan and for Health Action Plans and initiatives implement as part of Health Action Zones;
- Support of National Road Safety campaigns, from DETR and other sources, particularly those that are working towards reducing the speed of motor vehicles in both urban and rural areas;
- Local road safety campaigns to target particular concerns, for example, in-car safety, at-risk locations/areas;
- Targeted enforcement of areas where there are casualties related to speed or other law breaking;
- Promoting safety as part of integrated transport initiatives through the inclusion of Safer Routes to School projects within wider school travel planning activities and by the development of a holistic view of safety within the overall health impacts of travel mode.

## **STRATEGY DEVELOPMENT**

42. During the five-year term of the Local Transport Plan the West Yorkshire Road Safety Strategy will be continually reviewed and developed to address specific road safety concerns as policy develops and new issues arise. This action will focus on the need for reinforcing the broad based multi-agency approach we have established in order to sustain the reductions in road injuries that are being achieved. Slight injuries to car occupants have shown a very significant rising trend, for many years, and on detailed examination are generally confined to particular circumstances - 30mph roads,

inappropriate speeds and shunt-type collisions. This is to be addressed through the main aims and objectives of the West Yorkshire Road Safety Strategy to include changes to the environment, appropriate enforcement and specific publicity and education campaigns, to inform and involve local people.

43. A procedure is being developed to carry out child road safety audit to include the numbers, circumstances of, and the location of injuries to children as pedestrians, cyclists, car passengers or public transport users. It will consider the journeys that are made by children, the differences between particular age groups and whether or not, as pedestrians, responsible persons accompany them. More specific details of the proposals for developing child safety audit are set out Annex 3. Personal security issues that restrict travel opportunities are also being considered in West Yorkshire as part of the Local Transport Plan's measures for social inclusion.

44. Other developing issues are speed management projects where we are working together with local communities and, motorcycle casualties of whom those people aged 30-39 years are increasingly involved in road injuries. As stated previously fatal and serious injuries to motorcyclists have increased by 36% in West Yorkshire since 1994. As well as achieving a greater understanding of these emerging trends in motorcycle use and injuries, we will be looking to develop more effective measures to address the issues underlying these changes.

### **Resources**

45. The level of revenue support given for Road Safety Training is summarised elsewhere in the Local Transport Plan. However, working within existing and projected revenue budgets, training is limited by the very staff-intensive nature of training schemes and, although an expansion is sought, it is unlikely that comprehensive cover can be given throughout the area in the foreseeable future. In the future as green travel planning initiatives become more widely adopted, increasing revenue resources will need to be directed into joint initiatives.

46. Currently although the very significant increases in capital resources can support very worthwhile changes to the physical infrastructure the local authorities recognise that this capital investment must be matched by revenue resources to establish self sustaining patterns of travel change. The West Yorkshire Authorities will take every opportunity to draw in the additional resources necessary for this work both from the limited local resources available, from Government and Europe, and from external organisations and business.

### **The Way Forward**

47. There have been significant achievements in road safety and casualty reduction in West Yorkshire and the developing road safety strategy, together with the National Road safety Strategy, is the way forward to continue these achievements and to share best practices. It is a further opportunity to involve local people and to progress in a co-ordinated manner towards effective casualty reduction - to give travel choice and travel safety. The foregoing discussion is summarised below as the following key priorities for developing the Strategy over the five year life of the Local Transport Plan:

- The preparation of local District Action Plans which identify in detail the measures which are being pursued at the local level to implement this Strategy with provision for

periodic review.

- Further research and development to identify measures with which to tackle more effectively increases in slight injuries to vehicle occupants.
- Continued action and research to address the continuing issue of injuries to Public Service Vehicle passengers to build on previous work with operators which has been undertaken in Leeds and elsewhere.
- The development of child safety audit processes and further targeting of casualty reduction measures which particularly benefit children.
- Further measures which strengthen the links between safety and security initiatives and the wider adoption of travel planning by schools and business.
- Initiation of a fundamental review of speed limits throughout West Yorkshire and the adoption of appropriate speed management strategies at the local level.
- The development of further initiatives to address the issue of casualties to motorcyclists together with measures which support an emerging trend for greater use of motorcycles and ensure rider safety is improved.

## **ANNEX 1**

### **PERFORMANCE AGAINST CASUALTY REDUCTION TARGETS FOR THE YEAR 2000**

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	100	44	60
Serious	704	406	422
Slight	1924	1607	1291
<b>Total</b>	<b>2728</b>	<b>2057</b>	<b>1773</b>

*Table 1.1: Pedestrian Casualties*

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	7	5	5
Serious	130	84	87
Slight	576	558	384
<b>Total</b>	<b>713</b>	<b>647</b>	<b>476</b>

*Table 1.2: Pedal Cyclist Casualties*

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	38	12	15
Serious	598	145	209
Slight	1410	399	1004
<b>Total</b>	<b>2046</b>	<b>557</b>	<b>1228</b>

*Table 1.3: Powered Two Wheel Rider Casualties*

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	70	45	51
Serious	777	527	567
Slight	3508	8793	2561
<b>Total</b>	<b>4355</b>	<b>9365</b>	<b>3179</b>

*Table 1.4: Car Occupant Casualties*

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	25	9	15
Serious	372	196	223
Slight	1224	997	816
Total	1621	1202	1054

*Table 1.5: Child Casualties (Age 0 to 15 pedestrians and pedal cyclists)*

	<b>Base (1981-85)</b>	<b>Average 1997/99</b>	<b>Target 2000</b>
Fatal	16	3	8
Serious	171	67	86
Slight	472	394	236
Total	659	464	330

*Table 1.6: Casualties from crashes with at least one driver failing a breath test*

## **ANNEX 2**

### **CASUALTY REDUCTION TARGETS FOR 2010**

#### ***2.1 Targets for reduction in all injuries for 2005 and 2010***

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	115	92	69
Serious	1369	1095	821
Total	1484	1187	890

*Table 2.1.1: All Casualties - fatal and serious injuries*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Total	*	*	*

*Table 2.1.2: All Casualties - slight injuries (Rate)*

\* Figures to include casualty rates (per 100 million vehicle kilometres) based on traffic flow, awaiting additional National Traffic Census data from DETR.

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	50	30	25
Serious	474	190	237
Slight	1676	200	251
Total	2200	420	513

*Table 2.1.3: Pedestrian Casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	6	4	4
Serious	100	80	60
Total	106	84	64

*Table 2.1.4: Pedal Cycle Casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	10	8	6
Serious	136	108	82
Total	146	116	88

*Table 2.1.5: Motor Cycle Rider Casualties*



	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	44	35	26
Serious	575	460	345
Total	619	495	371

*Table 2.1.6: Car Occupant Casualties*

## **2.2 Targets for reduction in Fatal and Serious Injury to Children for 2005 and 2010**

	<b>Base</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	13	9	6
Serious	260	195	130
Slight	1731	1300	866
Total	2004	1504	1002

*Table 2.2.1: All child casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	8	6	4
Serious	179	135	90
Slight	802	601	401
Total	989	742	495

*Table 2.2.2: Pedestrian child casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	3	2	1
Serious	38	28	19
Slight	226	169	113
Total	267	200	133

*Table 2.2.3: Pedal cycle rider child casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	2	2	1
Serious	34	25	17
Slight	589	4442	295
Total	625	469	313

*Table 2.2.4: Car occupant child casualties*

	<b>Base (1994-98)</b>	<b>to 2005</b>	<b>Target 2010</b>
Fatal	0	0	0
Serious	3	2	1
Slight	88	66	44
Total	91	68	45

*Table 2.2.5: PSV Passenger child casualties*

## **ANNEX 3**

### **DRAFT FRAMEWORK FOR DEVELOPING CHILD SAFETY AUDIT**

#### ***Introduction***

A3.1 As explained in the Strategy in West Yorkshire we already have some detail considerable detail about child road safety issues. This framework has therefore been developed in response to the more detailed guidance provided in the national road safety strategy. The following actions are to be developed to enhance our process of monitoring and improving child safety, they will enable West Yorkshire to see how progress is being made towards the child casualty reduction targets and advise where further action could be usefully targeted. Further work will be conducted to provide a robust audit process which can be used across West Yorkshire.

#### ***The purpose of audit***

A3.2 We have worked from the presumption that an audit is a careful consideration, in a way that can be systematically repeated, of a situation. The audit will therefore look at where we are in West Yorkshire, with a view to looking in the same way again, at pre-determined intervals in the future, for monitoring purposes. It is not yet a strategy for action but will be able to report progress in this area. Although much information can be gleaned from Safer Routes to School questionnaires and other local data, we will concentrate for the purpose of the Audit on accessible, West Yorkshire wide data.

#### ***The Audit will include:***

A3.3 We will collate the casualty data for the County area and 5 Districts – any smaller areas could pose a logistic problem and the numbers are already quite small. It is intended that the data be broken down in to Electoral Ward areas in the future:

- We will address the age groups 0 – 4; 5 – 11; and 12 – 15 inclusive.
- We will consider casualty groups: child pedestrians, child cyclists, child passengers in cars and child passengers in buses.
- We will consider the numbers of fatal and serious injuries (KSI figures) as well as the slight injury totals for West Yorkshire.
- We will also consider casualties that arise on school journeys and will use the 'school journey' field from the collision report form as a guide for this. Analysis of this field over the past few years shows that it appears to be reasonably accurate as a proxy for casualties on school journeys. This will not be completely accurate but will at least be consistent.

A3.4 There are other factors that impinge on the data to a greater or lesser extent. This Information is not yet readily available but will be used to monitor the trends over the next 5 years.

- Using 5-year averages can iron out what trends are there in live births over the past decade – school populations will fluctuate year by year and this will affect the overall trend. If the underlying trend is up we should know.
- We consider that traffic levels will affect transport choices and casualty patterns. We will use the same figure for 100 MVKm as in the calculation of 'slight' casualty rates to

evaluate traffic increases and decreases.

- We will collect the Electoral Ward Boundary data for West Yorkshire and report each year on the child casualty position by Ward. This will help us to address the issue of locations of child casualties in a structured way.
- We will also try to monitor how far from home road injuries happen to children. Using Postcode data from the 1999 STATS 19 forms onwards and the grid reference of the road injury, we will identify how far, in distance bands, injuries happen from the home address.

A3.5 We hope to affect children's travel choices through many of our schemes in engineering and ETP. Full data from these surveys cannot form part of the audit but we should look at information we have on why choices have been made in the past. Safer routes to school questionnaires and other information we have could give us an indication of why modes are chosen.

- We will on one day a year survey as wide a sample of pupils as possible on 'how they travelled to school on that day'.
- This information will be divided into Primary and Secondary age children as far as possible.
- Choices around which schools are attended have grown this decade. We need to know how far children are travelling to school. We will endeavour to establish from Education Departments in West Yorkshire how many children travel over 2 miles/over 4 miles to school each day. If this information is not accessible we will need to devise a proxy for it.

A3.6 The following factors affect transport choices but cannot form part of the Audit:

- Traffic volumes on major routes pose a severance problem,
- Traffic Speeds are always an issue
- Work done to facilitate cycling and walking should be monitored

### ***Process***

A3.7 To monitor our progress we will check each year:

- Numbers of children in each of the three age groups 0 – 4; 5 – 11; 12 – 15.
- Distances travelled to school –
- Existing modal choice – from a survey of a large sample on one day each year – and
- Casualties in each age group

### ***Gaps in the process***

A3.8 We are aware that there are significant limitations to the process we propose and that we should be addressing wider factors in children's travel patterns and choices such as:

- How far they walk?
- How far they ride a cycle?
- What access do they have to a car (to be driven)?

- What access do they have to accompanied walking?
- How far is the nearest main road – a proxy for local danger? and
- How far is it so school?

### ***Monitoring***

A3.9 We will repeat the audit on a year by year basis.

A3.10 Targets for child casualty reduction are those in the LTP. Targets for modal change can only be realistically set when we know what the baseline information on child safety really is. However, we are involved with SRTS work we are reporting elsewhere in the LTP on reversing travel to school by car trends, and will link with that.

## **DEMAND MANAGEMENT STRATEGY**

### **INTRODUCTION**

1. Our strategy aims to reduce the demand for travel by private vehicles through measures to reduce the overall need to travel and to encourage the use of more sustainable alternatives. To achieve this it is necessary to implement demand management measures that deter car use, particularly for commuting journeys, alongside other measures that provide quality alternatives to the car.

### **OBJECTIVES**

2. Our Demand Management objectives are:

- to encourage people to use the most appropriate method of travel for their journey;
- to persuade car users to be less dependent on their cars;
- to raise awareness of the environment and social impact of car use.

### **STRATEGY**

3. A joint West Yorkshire Demand Management Strategy has been adopted and is shown in Table 1.

#### **WEST YORKSHIRE DEMAND MANAGEMENT STRATEGY**

The West Yorkshire Authorities recognise the importance of traffic demand management to restrain the growth of car use and promote the use of alternative modes, in order to combat the traffic congestion that might otherwise restrict the vitality and economic development of our towns and cities and to safeguard the environment for our present and future citizens.

We recognise the need to develop our strategy and have therefore adopted the following statement of agreed measures which encapsulates the strategy that we have already been pursuing and takes it forward in a number of important ways. In applying it, we will take account of the needs of different areas within West Yorkshire and the need to bring forward improvements to the quality of alternatives to the private car in step with the application of demand management. We also recognise the need to consult with appropriate interest groups.

- Where desirable, road space will be re-allocated to give priority to public transport, cyclists and pedestrians over general traffic. Demonstration projects will be implemented taking capacity away from general traffic if necessary. The effects of these projects will be monitored in order to see whether this principle can be used more widely.
- The price of parking within the control of local authorities, particularly long stay parking, will be raised in real terms on a co-ordinated basis, in line with agreed targets.

- In general, on street parking in major or larger urban centres will be subject to charging, and the extent of the charged areas will be reviewed as centres develop and expand.
- Where necessary, residents' parking zones will be implemented on the fringes of controlled and charged parking areas to prevent parking being displaced to these areas.
- The authorities wish to support the de-criminalisation of parking offences and take on responsibility for enforcing on-street parking restrictions, subject to satisfying themselves that this can be done on a practical and viable basis.
- In centres, preference will be given to short stay (less than 4 hours) over long stay parking, with conversion of spaces being actively pursued where possible. The scope for further action to prevent the use of short stay car parks by commuters will be considered.
- In general, maximum guidelines should be applied for the number of parking spaces at new developments, particularly in centres. The scope for co-ordinating these guidelines across West Yorkshire (and more generally across the Region of Yorkshire and the Humber) and linking them to public transport accessibility will be investigated.
- The authorities recognise the need to maintain sufficient parking to support the viability of centres and the requirement to improve alternative modes of transport. Nevertheless, the authorities will consider working towards overall reductions in the demand for parking provision in city and main town centres, converting any space released to more productive uses or environmental enhancements.
- The authorities will consider the implementation of a pilot demand management project using income from new charges to pay for transport improvements.
- The authorities will encourage the development of travel plans by employers by promotion, persuasion, and application of the development control process and setting an example of good practice themselves. Plans developed by the authorities will consider restrictions on the supply and the charging of staff and member parking.
- As members of TravelWise, the authorities will develop travel plans (as above) and other projects and campaigns to change attitudes to the use of the car and promote the use of alternatives.
- The authorities will promote School Travel initiatives to encourage the use of alternatives to the car for travel to and from school and encourage positive attitudes towards the use of alternatives amongst children as they grow up.
- The authorities will use the land use planning system to help reduce the need to travel and make the use of alternatives to the car more convenient.

*Table 1 West Yorkshire Demand Management Strategy*

## **PARKING**

4. The strategy recognises that the pricing and supply of car parking is, at present, one of the most effective demand management tools available to local authorities. All

district councils have been implementing consistent car parking policies for some time, the main features being:

- **progressive pricing policies** which have significantly raised the real cost of parking in the main centres, especially for long stay commuter parking;
- **expanding the scope of charges** with the extension of on-street charging to cover further streets, the introduction of on-street charging into some towns and the introduction of charging in smaller centres;
- **managing the parking supply** by giving preference to short stay spaces in the centres and providing longer stay spaces at peripheral locations. As a result, over 95% of core Central Business District public parking in West Yorkshire is short stay;
- **controlling peripheral on-street parking** through residents' parking schemes and waiting regulations;
- **development control** standards which reduce requirements for parking spaces within new developments in the main centres, which are well served by public transport, as far as is practicable and consistent with the need to maintain the viability of centres;
- **meeting special needs** by targeting some of the available parking supply towards disabled drivers;
- **park and ride**, to encourage mode transfer, particularly to the rail network, with bus based systems expected to play a greater role in future, in association with significant bus priority measures.

5. During the period of the Local Transport Plan we intend to develop the following:

- adoption of a co-ordinated charging policy across West Yorkshire, with targets for increases in real terms;
- work towards an overall reduction in the demand for parking spaces;
- extension of controlled parking areas;
- adoption of co-ordinated maximum parking guidelines for new developments, in line with national and regional planning guidance.

## MANAGING ROAD SPACE

6. An important contributor to demand management is the effective allocation of highway capacity (road space and junction capacity), which can be an important determinant in the destination and route of car trips. Across West Yorkshire this is being achieved by:

- integrated city and town centre schemes including extended pedestrianisation and traffic management to remove non-essential motor traffic and to give priority access for buses and cyclists;
- priority schemes which allocate space to alternative modes, principally by the introduction of bus and cycle lanes but also by the provision of good facilities for pedestrians;



- traffic calming and route management to concentrate through traffic on major routes where it can be managed with least impact on local communities; these measures will include 20mph zones and home zones.

## **CHARGING**

7. In the provisional Plan, Leeds City Council, in conjunction with Metro, put forward outline proposals for the introduction of road user charging in the city centre. In the Local Transport Plan settlement, Leeds was invited by the Government to join the “Charging Development Partnership’ and allocated an additional £2.5 million for further development of measures and proposals.

8. Leeds City Council has advised the Government that significant improvements to the city’s transport system are a key prerequisite to the introduction of road user charging. These will help to secure the city’s continued prosperity and sustainable development. Three conditions must be met before road user charging is introduced in Leeds:

- Supertram, East Leeds Link and Inner Ring Road Stage 7 are committed and substantially built, and improvements to the outer ring road approved with funding identified;
- any revenues raised are truly additional;
- all proceeds from road user charging are invested in local transport.

9. Leeds’ position is anti-congestion, not anti-car, in order to help achieve sustainable economic development and environmental improvements.

10. Leeds has also been selected as the urban trial site for the demonstration of road user charging technology and this trial should start in late 2000.

## **SUSTAINABLE TRAVEL INITIATIVES**

11. The West Yorkshire authorities are committed to a strategic approach that enables people to develop life-styles that are less dependent on private car use. We believe that sustainable travel initiatives should give added value to capital schemes through provision of alternatives and the encouragement to use them.

12. This strategy works through the Yorkshire and Humber TravelWise Group, which is the largest and one of the most active groups in the National TravelWise Association (NTWA). This provides a mechanism for:

- activity through the 17 Local Authorities of the region;
- influence at national level through NTWA and at European level through Metro’s representation, on behalf of NTWA, on EPOMM (European Platform on Mobility Management).

### ***‘Target’ Project***

13. Metro is lead partner for the European *Target* project, on behalf of Yorkshire and Humber TravelWise Group. *Target* is a key means of testing the effectiveness of different interventions to promote sustainable travel activity. It currently forms a two-year pilot phase of an eight-year project, funded through the Interreg IIC programme of the European Regional Development Fund (ERDF). The project looks at links between

transport and land use planning and development.

14. The work is delivered through seven 'work packages' and involves development of a variety of initiatives including:

- **Mobility Management** – integrating public transport information initiatives with travel awareness, building on best practice in co-operation with partners in Bremen and Göteborg, and developing joint initiatives with regional partners;
- **Flexible Working** – reducing the need to travel through changing working practices and exploiting the benefits of Information and Communication Technologies;
- **Shopping and Leisure** – targeting the journeys with highest growth in private car use by for example: innovative schemes such as internet-based shopping; promoting public transport for leisure trips, including sustainable tourism to and around the Yorkshire Dales, thereby also enhancing accessibility to and from rural areas for other purposes;
- **Pollution Reduction** – enabling reduction of greenhouse gas emissions through real-time detection and action focussed on the most highly polluting vehicles together with action to develop alternative fuel sources;
- **Green Travel Plans** (see business travel plans below);
- **School Travel Plans** (see below);
- **Cycling and Walking** – promoting measures that develop confidence in cycling, and highlighting the role of benign modes in health promotion and in reducing social exclusion.

15. West Yorkshire authorities are leading three of these work packages. In addition, Leeds is part of an EU project developing a CD-ROM/Internet based 'Toolbox' which is an electronic guide to developing a business travel plan.

## PROMOTION OF ALTERNATIVE MODES

16. Through TravelWise we will promote activities that are clearly integrated with related areas of the Local Transport Plan including public transport information, pollution reduction measures, travel planning and infrastructure development.

17. The regional TravelWise group enables the exchange of best practice on such issues. In addition, Wakefield, on behalf of the region, is undertaking the role of developing the NTWA/EPOMM UK web site, which is developing a virtual centre for information on all aspects of travel awareness activities. It will also include the findings of a number of 'virtual expert groups', each of which has a representative from this region.

18. All of the West Yorkshire authorities support national travel awareness campaigns including:

- continued support of activities within 'Don't Choke Britain', 'Walk to School week', 'National Bike Week', and other transport campaigns;
- extensive promotion of bus and train services;
- development of initiatives to encourage drivers to share cars where they have similar origins and destinations;
- support for the UK's first community-based shared car ownership scheme, 'Co-Drive'

and encouragement of the development of similar community based car-sharing clubs.

19. It is a feature of activity in West Yorkshire that we are moving towards pro-active, focused initiatives targeted at specific groups or communities, rather than a 'blanket' promotional approach.

## **BUSINESS TRAVEL PLANS**

20. A 'Travel Plan' is a management tool that enables an employer to develop strategies and measures to reduce private car usage and parking by staff (and visitors), and to encourage and enhance travel by more sustainable modes.

21. We have identified four areas for Travel Plan development:

- **targeting** organisations;
- **enabling** these organisations to develop a Travel Plan through appropriate support;
- **integrating** Travel Planning with broader sustainable travel policies and activities;
- **monitoring** Travel Plan take-up and effectiveness.

### ***Targeting***

22. The approach to be taken is dependent on the motivation of organisations seeking to develop a Travel Plan. Organisations can be characterised as:

- those who actively **want to** develop a Plan;
- those who **have to** develop a Plan, usually as a condition of the Development Control process;
- those who '**should**' develop a Plan, on the basis that we have targeted them as the organisations most likely to deliver greatest impact.

23. This last category of organisations may be targeted on one or more of the following criteria:

- they are one of a number of neighbouring employers either in a **cluster** (e.g. a business park, trading estate or other geographical area) or on a **corridor**. This arrangement could develop an overall site strategy with each employer developing their own individual Travel Plans that together deliver the aims of the overall Plan.

example: The Leeds Civic Precinct TravelWise group includes representatives of a cluster of large organisations on the North side of the City Centre.

- they have **strategic** importance

example: Bradford Health Authority has a relatively small staff but is a key organisation because of the important links between transport usage and public health; they have a crucial role in influencing Travel Plan development in other parts of the health sector; and it is an important member of the West Yorkshire Transport and Health Collaborative Group and the Saltaire Transport Group.

- they are a **large** employer

examples: Zeneca Agrochemicals in Huddersfield and Halifax plc in both Halifax and in Leeds are large employers locally and are part of sizeable companies.

- they are situated near existing or planned **High Quality Transport Facilities**  
example: Organisations on Kirkstall Road, such as First Leeds, are ideally placed for Travel Plan development, in anticipation of infrastructure development in the future.
24. Employers situated near high quality transport facilities are those where there may be the greatest potential to encourage car drivers to try alternative modes. Targeting Travel Plans in areas where improvements are proposed may allow the changes in attitude to start and lead to acceptance and use of the improved facilities when they become operational
25. The targeting criteria are now being used to identify business and other organisations that have made relatively little or no progress in Travel Plan development. Targeted organisations can then become the subject of direct promotional work.
26. The West Yorkshire authorities are setting themselves the target that Travel Plan documents will be complete and the Travel Plans implemented within two years (i.e. by Summer 2002) for all the organisations with whom we are in direct contact. Plans for the authorities' own sites will also be largely complete by then.
27. Within the following three years (2002 – 2004), we aim to double the organisations approached successfully and implementing a Plan, as identified through the above selection criteria.

### ***Supporting and Enabling***

28. Each of the West Yorkshire authorities has one or more officers nominated as responsible for Travel Plan development and this resource needs to be used in the most effective way by targeting staff resources efficiently. To aid this resource usage, the *Target Green Travel Plans* work package is developing and testing a pro-active approach towards identifying the most effective way of bringing about voluntary adoption of Travel Plans amongst a reluctant target audience.
29. In addition, non-officer support is available in a number of ways:
- Leeds City Council is part of a consortium funded by the EU SAVE-II programme which has developed a **CD-Rom/Internet based 'Toolbox'** of options for employers developing Travel Plans.
  - Metro is undertaking **consultation** with local authorities and with target organisations to establish the needs of these organisations and how those needs can be best supported.
  - links to a wider national expert network through the **National TravelWise Association website.**
  - **additional resources** may become available through the **Target project** to develop a dedicated website that will support organisations working through the Travel Plan process.

### ***Integrating***

30. West Yorkshire authorities aim to target Travel Plan take-up where finance has been made available for high quality public transport services, cycling and walking facilities.

31. Organisations developing Travel Plans will be encouraged to allow Internet access to the regional Journey Planner or to place it on company intranets. Organisations will also be advised to take advantage of ticketing schemes such as Company MetroCard and to involve themselves in consultation processes concerning highway infrastructure and public transport service development. Such organisations will also be asked to address themselves, not only to the needs of their staff but also to visitors and to the demands of sustainable distribution.

32. Partnerships are being developed with the major Health Authorities and the larger NHS Trusts and linkages are being made between health and transport policy.

33. Lessons from West Yorkshire will be shared with neighbouring authorities through the *Target* Green Travel Plans work package and through the Yorkshire and Humber TravelWise group, and more widely through the NTWA and other bodies such as the Association for Commuter Transport (ACT).

### **Monitoring**

34. Monitoring is being carried out according to both the rate of take-up of Travel Plans and by their effectiveness. Each authority is keeping a record of operational Travel Plans in their area and the progress made year on year, according to Indicators including

- establishment of initial contact;
- the existence of a Travel Plan working group;
- existence of a written Plan, which the organisation is working towards implementing.

35. The massive variation in the types and sizes of companies implementing Travel Plans makes it unfeasible to have a single set of criteria for judging their success or otherwise. There are, however, a number of measures that would enable monitoring of effectiveness to take place on a site by site basis, which could include (reduction in) number of parking spaces, take-up of Company MetroCard or other discount public transport tickets, increased provision of cycle storage facilities, numbers of employees registered to a ride-sharing scheme and reduction in business travel costs. In addition, organisations undertaking Travel Plans under the auspices of *Target* are being encouraged to monitor change in staff attitudes as a result of going through the Travel Plan implementation process, as an early indicator for behavioural change.

36. Monitoring detail and targets are included in the Annual Progress Report. This also includes a position statement for developing Travel Plans for the local authorities' own sites.

### **Travel Plan Future Strategy**

37. Discussions are taking place regarding the possibility of developing a joint Travel Plan Implementation Group which can co-ordinate policy and provide strategic advice on travel plan issues across the West Yorkshire area. Such a grouping would help by promoting best practice within the planning development control process and co-ordinate the provision of advice and services to business and other organisations.

38. One delivery mechanism under consideration is a dedicated Implementation Unit, first suggested at the LTP interest groups conference in October 99. It would work in partnership with the businesses themselves and with public transport operators, and

could draw in private sector funding.

## **SCHOOL TRAVEL PLANNING STRATEGY**

### ***The School Journey***

39. School journeys have a significant impact on levels of peak time traffic and the school environment is an obvious target for developing travel plans that demonstrate real alternatives to dependence on the private car. Car dominated school travel has proven disadvantages for the health and independence of young people and encourages the assumption that future journeys should be made by the car

40. A good school travel plan involves a wide range of stakeholders and partners working together to encourage children, parents and staff to manage their journeys so that the number of car-borne trips can be kept to a minimum, especially where only short distances are being travelled. This may require a complex set of initiatives such as creating special bus services, organising car sharing, developing 'walking buses' and significant investment in infrastructure, or a simple solution such as the provision of secure cycle parking.

41. We see the strategy for developing travel plans for schools as dependent on a combination of these interventions and the positive participation of schools themselves.

### ***Aim***

42. Our aim is to develop School Travel Plans by establishing examples of good practice throughout the region. This good practice is being collated and disseminated into a series of tool kits or actions that can become part of a School Travel Plan. Regional road safety, safer routes and TravelWise forums are already involved in this task. The *Target* Project School Travel Plans Package is also piloting good practice and comparing examples with our European partners.

43. Best practice in school travel planning should:

- approach the issue of school journeys in an holistic manner;
- help children achieve safe independent travel to and from school;
- reduce the need for parents (in most cases mothers) to drive their children to school;
- provide the conditions for developing sustainable patterns of travel.

44. Safer Routes to School projects across the region have shown that there is no package that is applicable to all schools. The data collected in surveys has given us snapshots of travel patterns and close monitoring of travel to and from school will be implemented across the region.

### ***Principles***

45. School Travel Planning across the County is developing within a process/ framework of four fundamental principles and is constantly evolving, partly in response to Government guidance, partly because of experience and shared best practice and partly through opportunity. These four principles can be defined as:

#### Targeting

46. Criteria for targeting schools involve a number of issues across the County. It is

important to target activity on schools where a real effect can be seen and where an issue exists to influence. These may include accident involvement of students, levels of car use for school journeys, other local initiatives such as traffic calming, or direct approaches from schools. In a few cases new school developments are taking place with school travel plans as a planning condition.

### Enabling and Supporting

47. School Travel Planning is in its infancy, with few proven techniques to affect the school journey, which are universally acceptable, being available. It is essential that all the partners in the process are comfortable that the actions they are taking or proposing are the right ones. This is as true for the School Travel Planning officer in the local authority as it is to the parent, teacher or governor in a school.

48. Taking care over the development of projects over the short-term will lead to greater acceptance of the need for school travel plans in the longer term. Resources must therefore be used to reflect this by, where possible, making officer time available to maximise the partners understanding of, and involvement with, the issues involved. This is particularly important during these early stages of school travel plan development.

### Integrating

49. Schools do not generally perceive that they have a problem related to transport choices, or a responsibility to be involved in any solutions. To most schools transport problems are the lack of car parking space for teachers and insufficient room outside the school gates for parents to safely drop off or pick up their children. At the same time, they are being approached by other agencies, or encouraged by other government strategies to increase levels of physical activity amongst their pupils, or create a healthy school environment, or be a focus for community redevelopment.

50. School travel planning has a part to play in all these emerging issues, placing a responsibility on local authorities to integrate these activities by developing partnerships with other agencies. It will become easier to persuade schools to be involved if they are offered solutions to their own perceived needs and they can be shown local examples of interventions that really work.

### Monitoring

51. School travel planning involves a significant investment by all the partners involved. Districts are working together to develop monitoring methodology that will allow comparison of activities across the County. The requirement for child safety audits will, in the longer term, indicate whether or not school travel planning and other transport related activities are having any effect on the safety of school pupils and the ways in which they travel.

### **Stakeholders**

52. 'School Travel: Strategies and Plans', recently published by the Department of the Environment, Transport and the Regions (DETR), identifies a number of partners who could be involved in the process of developing school travel planning strategies and in developing individual school travel plans. Within West Yorkshire the major stakeholders identified as having a critical role within these processes have been identified as:

- the Local Authority:
  - Highways Department
  - Education Department
- school representatives parents, teachers and children
- Metro (the passenger transport executive)
- West Yorkshire Police
- Health Promotion
- local residents
- local businesses

53. Currently, with the responsibility for school travel planning issues resting with local authority highways departments, the creation of active partnerships is proving slow, as each of the potential partners faces their own responsibilities. Authorities across the County are seeking effective ways in which to involve the widest range of stakeholders.

### ***Other Influences***

54. National, regional and local 'walk to school' initiatives have developed a high level of uptake and walking is still the most common means of travel to school. A regional cycle training group has enabled some co-ordination of cycle training throughout Yorkshire and the Humber and pooling of resources. Developing cycling and walking to school can help young people develop independent travel patterns that can serve them well beyond the school gates.

### ***Experience so far***

55. Regional experience has shown that the majority of schools have not responded to invitations to develop school travel plans. Even where plans have been developed ownership of schemes is low and there are significant shortfalls in staff and time allocated both in the schools and the local authority. Whereas budgets have been made available for implementing schemes to enable sustainable travel, consultation and working with schools is significantly under-resourced. The resolution of issues around revenue resourcing of **staffing** (including teacher release) and **ownership** is most likely to help widespread adoption of school travel plans across the region.

### ***Activities under development***

#### West Yorkshire Metropolitan Districts

56. All the authorities across West Yorkshire are actively involved in developing programmes for the development of School Travel Planning and associated activity within Safer Routes to School Projects appropriate to local conditions. These include:

- **Data Collection.** Authorities across the Yorkshire and the Humber region are working together to create a common approach to data collection enabling comparisons on modal change to be made in the future.
- **Partnership development.** Within Districts building partnerships with stakeholders is critical in the implementation of individual plans and development of wider partnership networks across the County and the wider region, in such as the *Target*



initiative, helps to develop our access to good practice.

- **Pilot projects.** We are working on pilots such as the development of deliverable and sustainable pedestrian skills training package in Kirklees and an educational resource focusing on transport choices in Leeds. We are also using the issue of school gate parking as a means of influencing parental attitudes in Bradford and Wakefield. Both these are helping us to advise schools on opportunities for their own Travel Plans.
- **External events.** Active participation is encouraged in Walk to School Week, National Bike Week, Brake National Road Safety Week and other focused activity throughout the year.
- **Joint working.** Shared experience on cycle and pedestrian training to give young people the skills they need to safely undertake independent travel, as they grow older, builds our knowledge base.
- **New ideas.** Novel engineering interventions to highlight the area around schools and pick out primary walking and cycling route networks supports other behavioural change.
- **Sharing knowledge.** Dissemination of experiences, both positive and negative, helps us to recommend interventions with confidence.

#### Metro (West Yorkshire Passenger Transport Executive)

57. Within passenger transport executives regionally there is a growing understanding of the important role which they can play in supporting and influencing the travel planning process. For longer journeys public transport offers the best alternative to the car in terms of safety of users and efficient and sustainable use of road space. A number of issues are under consideration within Metro:

- promotion of school bus use;
- a common school travel pass and boarding card system administered by Metro on behalf of the LEA's and Transport Operators;
- Updating the 'Code of Conduct' leaflets issued to schools, parents, and operators;
- Developing safe methods of buses at school sites;
- partnership approach to planning and changing bus services.

#### **Conclusion**

58. School Travel Planning has the potential to make a significant contribution to the development of sustainable patterns of travel. Whilst in its infancy, the recognition of this contribution by Government in the form of strategic influence is clear. The recent publication of 'Tomorrow's Roads - Safer For Everyone' (DETR) serves to support this activity and reinforce guidance distributed to local highway authorities and schools with the two documents 'School Travel: Strategies and Plans' (DETR, 1999) and 'A Safer Journey to School' (Department for Education and Employment, 1999).

59. The Districts of West Yorkshire are working together to develop these initiatives and find solutions to some of the bigger barriers to implementation. These include raising the interest of education in general and schools in particular to the issues, and the significant extra demands on staff time that this type of initiative involves.

60. Every opportunity is being taken to share experience as widely as possible. Opportunities for this exist within the County and the Region and are being developed across Europe with projects such as *Target*.
61. The collection of base levels of data associated with the child safety audit process will, at a future date, allow the setting of realistic targets on the reduction of car use for the school journey.
62. Experience of projects so far has shown that a great deal of effort will be involved in reversing past efforts to promote the car culture, but that the potential to affect levels of traffic, particularly in the morning peak, are significant.

## **WEST YORKSHIRE SOCIAL INCLUSION STRATEGY**

### **INTRODUCTION**

1. The socially excluded have been described as those individuals, groups or communities that are, by virtue of poverty or discrimination, excluded from mainstream opportunities, activities and access to services available to the wider community. Social exclusion is a short hand label for what can happen when individuals or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown.
2. The impact of social exclusion is intensified by complicated, time consuming or expensive transport access to jobs, training, health facilities, shops, sports facilities or community services or facilities which provide opportunities to encourage social cohesion. Socially excluded groups are, for a variety of reasons, e.g. low income, disability, more dependent on public transport than socially included groups who have greater access to the private car. Non-car owners, given the role of the car in transport, will continue to be excluded in society unless strategies to tackle exclusion are implemented. Consequently, affordable, accessible and safe public transport and pedestrian environments are very important to the development of socially included communities.
3. Measures which aim to increase access to public transport services and access to employment and training opportunities, goods and services can all contribute to the reconnection of excluded groups and communities. Transport planning with benefits such as new public transport routes, traffic calming measures or improved travel information targeted at geographical areas of poverty and deprivation will also have social inclusion impacts. In relation to rural deprivation, because of the lack of accessible, affordable public transport options many low-income families find a car is a basic necessity and here fiscal measures aimed at dissuading car use can further contribute to exclusion. The role of community based transport services has particular relevance in rural areas.
4. Our priority is to ensure that nobody is excluded from using the transport system. In developing and implementing transport policies and initiatives we will consider both the access implications for socially excluded groups and communities, as well as the social impact of those policies.
5. A number of measures set out within this strategy will aim to reduce physical, financial and other barriers which may reduce travel choices for excluded groups and communities. Further initiatives will be geographically targeted at rural areas and disadvantaged urban areas with the aim of increasing access to employment and training opportunities and access to essential goods and services.
6. We plan to address the share of decision making in relation to transport between socially included and excluded groups through effective consultation and public participation. A multi-agency approach with a focus on community involvement will ensure the successful implementation of this strategy.

### **NATIONAL AND REGIONAL STRATEGIC CONTEXT**

7. The Government's approach to social inclusion ('Bringing Britain Together', Cabinet Office Social Exclusion Unit, September 1998) is predominantly aimed at

integrating excluded individuals and communities into the mainstream activities and processes of daily life. The government's Social Exclusion Unit Task Groups who recently published a "National Strategy for Neighbourhood Renewal", for consultation, have identified public transport as one key area to increasing access to work and facilities in deprived communities.

8. The Local Transport Bill currently progressing through parliament identifies that the local Bus Strategy, which forms part of this Plan, should have regard to the needs of older people and those with mobility difficulties. The importance of concessionary fares is indicated with a proposed mandatory minimum benefit scheme. A new obligation to require a Best Value approach to tendered bus services replaces criteria for allocating contracts based solely on lowest cost. Other provisions that would help to address social inclusion include support for quality bus partnerships (possibly under-pinned by Quality Contract Schemes), integrated ticketing and information systems and environmental measures.

9. In November 1995, the Disability Discrimination Act (DDA) became the first law to support the rights of disabled people to access employment and other goods, facilities, services and premises available to the general population. The Act also makes provision for regulating the design of buses, trains and taxis to ensure they are safe and comfortable to use by disabled people.

10. A commitment to reducing social exclusion is a recurring theme within the regional agenda. The Regional Economic Strategy recently developed by Yorkshire Forward (the Regional Development Agency for Yorkshire and the Humber) sets out a ten-year framework to transform the regional economy in rural and urban areas. In October 1999 the Regional Assembly for Yorkshire and Humberside published draft regional planning guidance, "Advancing Together: Towards a spatial Strategy", incorporating the Regional Transport Strategy. Both strategies recognise that social inclusion has a key role to play in the regeneration of the region. The strategies feature a commitment to the inclusion of communities through sustainable development, recognition of the need for access to good public transport services and access to population related services such as health, leisure and shopping facilities as well as training and employment opportunities.

11. The drafting of the Single Programme Document for the new Yorkshire and Humber Objective 2 Programme for the period 2000-2006 has sought to develop the structural funds programme as a means of delivering the Regional Economic Strategy. The programme will have a clear commitment to tackling social exclusion as part of its wider regeneration agenda, and acknowledges that access to transport can be a potential barrier to the economic re-engagement of disadvantaged communities.

## **VALUES AND PRINCIPLES**

12. There are a number of themes which underlie the values and principles to be applied to increasing social inclusion through the local transport planning process. These, set out in Table 1, provide the framework for developing initiatives which tackle each area to be addressed.

Accessibility	<ul style="list-style-type: none"> <li>• of jobs, education and services, e.g. health, social, sports, to all</li> <li>• by implementing the Disability Discrimination Act in all modes of passenger transport, information about the services and in the built environment</li> <li>• through affordability of transport to individuals</li> </ul>
Personal Safety and Security	<ul style="list-style-type: none"> <li>• by provision of safe transport</li> </ul>
Community Involvement	<ul style="list-style-type: none"> <li>• through consultation and involvement of socially excluded groups and communities in the development and delivery of the Local Transport Plan</li> </ul>
Reduction of Negative Transport Impacts	<ul style="list-style-type: none"> <li>• through targeting improvements at deprived communities</li> </ul>
Mainstreaming	<ul style="list-style-type: none"> <li>• integrating social inclusion issues and measures to address them in strategies across the Plan and within the implementation of mainstream transport schemes</li> </ul>
Rural Development	<ul style="list-style-type: none"> <li>• through improving access to remote or dispersed employment, education and social opportunities, particularly for young people</li> <li>• development of sustainable community based transport initiatives</li> </ul>
Planning Issues	<ul style="list-style-type: none"> <li>• developing better links between transport provision and development control processes</li> </ul>
Economic Regeneration Development	<ul style="list-style-type: none"> <li>• through development of links between local regeneration partnerships and statutory and commercial transport providers</li> </ul>

*Table 1: Values and Principles*

## OBJECTIVES

13. We aim to ensure that nobody is excluded from using the transport system and that transport policies complement broader social inclusion strategies. More specifically, our objectives in tackling social inclusion are:

### **Accessibility:**

- to promote equal opportunities for access to transport.

### **Access to Jobs and Training:**

- to promote better access to jobs and training opportunities from disadvantaged communities.

### **Transport Impacts:**

- to ensure that disadvantaged communities benefit from transport investment;

- to ensure that investment is targeted to reduce adverse safety and environmental effects of transport use on disadvantaged communities.

### **Planning Issues:**

- to ensure that the planning system takes proper account of connections between transport and social inclusion.

### **EXISTING INITIATIVES**

14. There are a number of existing strategies, facilities and services which aim to reduce the barriers to accessing public transport for excluded groups. We have developed an action plan which sets out extensive further initiatives to be developed during the lifetime of this Local Transport Plan.

#### ***Access to Public Transport***

15. In November 1995, the Disability Discrimination Act (DDA) became the first law to support the rights of disabled people to access employment and other goods, facilities, services and premises available to the general population. The Act makes provision for regulating the design of buses, trains and taxis to ensure they are safe and comfortable to use by disabled people.

16. Our long-term aim is to ensure that the transport system (vehicles, infrastructure and information) is fully accessible. Achieving this aim depends on effective partnership between highway authorities, Metro, public transport operators and Railtrack.

17. Considerable progress has been made in developing, in conjunction with operators, a strategic approach to improving access to public transport. A Strategy for access to public transport has been developed and agreed by all the West Yorkshire partners and bus operators (see Table 2). We are continuing to discuss the strategic approach with the train operators and Railtrack. A comprehensive checklist also acts as a means of ensuring the adoption of good practice.

The West Yorkshire District Councils, West Yorkshire Passenger Transport Authority, Metro and West Yorkshire bus operators fully support the principles of the Disability Discrimination Act. We will work together to create a public transport system which provides the highest achievable standards of access for disabled people.

We will take account of the needs of:

- people who have difficulty walking or who use a wheelchair;
- sight and hearing impaired people;
- people with communication difficulties;
- people with learning disabilities;
- people who have difficulty with stretching, reaching or dexterity.

It is important that every aspect of a journey should be accessible for a disabled person. Consequently, in designing accessible bus and rail services we will address each of the following stages of a journey:

- the safety and security of disabled people;
- pedestrian access to bus stops and bus and rail stations;
- the waiting environment at stops or stations;
- boarding and alighting buses and trains;

- vehicle design and fleet renewals;
- information availability before and during a journey;
- staff skills in addressing the needs of disabled people.

We will support the preparation of funding bids (e.g. Local Transport Plan) and seek financial support from other sources to fund public transport access improvements:

- at bus stations and railway stations;
- in town centres;
- along key bus service routes.

We recognise that the Act requires all reasonable steps be taken to remove barriers to facilities and services. Pending the production by the national Government of definitive up-to-date technical guidance for public transport infrastructure design, we will continue to build new and refurbish existing facilities to the standards currently recommended by DETR, including:

- 'Meeting the needs of disabled passengers' - Office of the Rail Regulator;
- 'Accessible public transport infrastructure' - DETR and PTEG;
- 'Guidance on the Use of Tactile Paving Surfaces' - DETR;
- 'Reducing Mobility Handicaps' - The Institution of Highways and Transportation;
- DPTAC recommended standards.

In addition, we will endeavour to improve access to public transport services in West Yorkshire by developing, implementing and reviewing good practice in relation to:

- pedestrian access to stations and stops;
- bus stop design, including boarding and alighting arrangements;
- service information;
- staff training

*Table 2: West Yorkshire Public Transport Access Strategy*

### Bus Stops

18. Bus stop design testing with local access groups has shown that a high degree of accessibility can be achieved through a combination of raised kerbs and low floor buses, providing the bus can stop adjacent to the kerb. Bus stops, including approaches and exits can be made accessible, in some cases with police assistance, in the following ways:

- preventing obstruction by parked cars and other vehicles in order to allow buses to pull up adjacent to the kerb edge by using bus stop clearway, other markings and bus boarders;
- designing the bus stop environment to remove obstructions that impede movement by pedestrians;
- reducing the vertical gap between the kerb and the bus by ensuring a minimum kerb height of 125mm wherever practicable;
- preventing excessive gradients when ramps are used.

19. Corridor schemes on A61 Leeds Road, Wakefield, and A629 Keighley Road, Halifax, have included raising kerbs at bus stops to 150mm in order to facilitate boarding and alighting.

20. We will work together, through quality partnerships and other means, with operators to further improve access to vehicles and conditions on the vehicle itself, taking into account the views of users and using appropriate technology.

21. The design guidance notes 'Highway Infrastructure for Bus Stops' produced by CSS, the Association of Transport Co-ordinating Officers and Confederation of Passenger Transport will be used to provide advice on bus stop design until further guidance is available from DETR.

#### Bus and Rail Stations

22. The existing guidance from the 'Public Transport Infrastructure Design Guidelines' has been used together with the outcome of consultation with local access groups to make access improvements at all publicly owned bus stations and in the reconstruction designs for Bradford Interchange and Wakefield Bus Station.

23. Major access improvements have been achieved through:

- provision of a passenger operated lift to platform level at Halifax rail station;
- installation of passenger lifts at Dewsbury rail station;
- platform heightening on the Airedale Line to match new accessible trains.

24. We will continue to work with rail operators and Railtrack as they continue to develop their strategies for further rail access measures across the county.

#### Information

25. Access to information is a key element in the provision of a public transport system that provides the highest achievable standards of access for disabled people. The recent Metro Mystery Traveller project was commissioned to assess and advise Metro of the availability of public transport information and additional services in accordance with the Disability Discrimination Act Part III.

26. A cross section of people with physical and sensory disabilities and learning difficulties as well as able-bodied participants took part in a range of tasks for the project. These included assessing availability of information, service provided by staff, layout of travel centres and the level of service provided for people with a range of disabilities.

27. The findings indicated the standards of information service provision by Metro are generally high. Disabled travellers did suggest some minor improvements that would enrich the information service provision for people with disabilities. Some of these recommendations have already been accepted, and some are still being considered.

#### Consultation

28. Accessibility standards at new bus and rail station schemes are subject to consultation with access groups. The following schemes have been or will be implemented using the outcomes of consultation with local access groups:

- bus stop test sites project;
- demonstration corridors in Wakefield and Halifax;
- bus stations (Leeds Corn Exchange, Bramley, Ilkley, Castleford, Pontefract, Hemsworth, Brighouse, Dewsbury, Huddersfield);



- redevelopment of bus stations at Bradford Interchange, Wakefield, Huddersfield and Keighley;
- access improvements at Dewsbury and Halifax Rail Stations;
- electronic audio and visual information at Halifax, Dewsbury and Leeds City bus stations;
- major corridor bus schemes in East Leeds and North-east Bradford, with emphasis on providing full accessibility.

### ***Access to Roads and Footways***

29. Using the highway can present a number of difficulties for people with visual and mobility impairment. To address these difficulties, we are currently developing a West Yorkshire Access Strategy which will aim to make services accessible and particularly to ensure provision for disabled people is made within the mainstream environment. Our strategy will ensure that the relevant steps are taken to comply with the Disability Discrimination Act and that disabled people are fully consulted.

30. We will reduce these difficulties by:

- working towards all footways and crossings being of adequate width, evenly surfaced, and free of obstructions;
- providing accessible crossing points, particularly at junctions, including audible and tactile information at traffic signals;
- adopting an inclusive approach to design, by ensuring that access issues are considered early in the design of schemes, as required by the “hierarchy of consideration”.

31. Within the major centres good standards of accessibility are being maintained and developed by:

- ensuring that public transport services continue to have good penetration;
- providing convenient disabled parking spaces;
- supporting ‘Shopmobility’ schemes which provide independent mobility within the central areas.

### ***Concessionary Fares***

32. Concessionary Fares are a lifeline for many people, providing enhanced travel opportunities for older people, disabled, blind and young people. Over 40% of bus journeys within West Yorkshire are made under the Concessionary Travel Scheme. Operator reimbursement is both a major area of expenditure for Metro and a significant source of income for operators, helping to sustain services for the benefit of all passengers in West Yorkshire.

33. Provision of affordable travel for those with limited financial resources because of age, disability or family circumstances continues to be a prime commitment. From the inception of the Scheme in 1986, we have ensured that all those eligible within scope of the provisions of the Transport Act 1985 have been entitled to concessions in West Yorkshire, extending the Scheme at the earliest opportunity to cover those categories subsequently added by secondary legislation.

34. A partnership approach has also made it possible to retain the free travel facility for blind persons and their eligible companions as a result of operators agreeing to commercially fund certain elements of the concessionary fare.

35. Two key strands of Government policy are the establishment of a minimum national standard for concessionary fares for older people and also the encouragement of children to travel to and from school by public transport. Whilst the West Yorkshire scheme supports and actively promotes these objectives it will shortly be undertaking an extensive review of its current policy.

### ***Personal Safety and Security***

36. Concerns about personal security deter many people from travelling by public transport especially after dark. Initiatives which aim to improve safety can play a significant role in increasing travel opportunities, thereby promoting greater inclusion.

37. Existing achievements to improve safety will be consolidated and developed through a strategy for securing personal safety for transport users. As well as covering the needs of the general public it will identify and cater for the particular needs of vulnerable groups, including women, older people and disabled people, members of ethnic minority communities and lesbians and gay men.

38. We are working to improve the safety and security of travellers by:

- taking account of safety and security in the design and provision of new facilities;
- providing security staff on duty at larger bus and rail stations;
- monitored CCTV coverage at all Metro bus stations and many rail stations, in many car parks, subways and town and city centres;
- providing improved street lighting;
- publicity and educational campaigns;
- piloting a safety audit approach on a number of public transport corridors and investigating means of improving safety throughout the door-to-door journey.

39. Community consultation has played an essential role in the development of the Safety and Security Strategy (see Chapter 6) and in taking into account the needs of socially excluded individuals, often living within otherwise socially included neighbourhoods.

40. We will develop links with Crime and Disorder Partnerships across the County, to establish integration of transport policies in local strategies to tackle crime.

### ***Planning Issues***

41. Planning and land use development can have a significant impact on social exclusion. The trend in recent years to develop out of town shopping facilities has meant that those people without access to a car have become increasingly disadvantaged, particularly as this trend has affected the economic viability of more central shopping facilities. For many disadvantaged communities access to good quality, affordable fresh food and groceries has become complicated and expensive.

42. Changing employment patterns have resulted, in recent years, in the development of large employment sites in out of town areas that are often difficult to access by public transport. This is often compounded by difficulties arising from shift

work, with employees being required to start or finish work very early in the morning or late in the evening when public transport services are more infrequent or not running at all.

43. Planning agreements can contribute to social inclusion through ensuring that new developments are accessible by public transport or by seeking planning gain from the developer to improve access to the site.

44. Currently the planning application consultation process between Metro and the District Councils is the key to locating development in the right areas, namely those well served by public transport to significant employment, shopping, leisure and healthcare services. This process will be further consolidated through the development of planning guidelines to assist developers to take account of public transport facilities within the planning of new developments.

### ***Access to Work***

45. A project officer has been funded through a successful European Regional Development Fund bid to liaise and consult with targeted excluded communities in West Yorkshire with a focus on access to work issues. The project aims to:

- target residents and community groups in disadvantaged areas, using appropriate and accessible consultation methods to identify the barriers to using public transport to access employment and training opportunities;
- identify enhancements to the public transport system that would enable residents of the target communities to access employment opportunities more easily;
- develop pilot schemes aimed at improving access to training and employment opportunities for residents of target communities;
- liaise with developers of certain strategic sites in order to maximise opportunities for residents of target areas to access new employment opportunities arising from the development of those sites;
- liaise with employment services and local labour initiatives in the development and delivery of the project;
- promote Green Travel Plans as a means of maximising access to employment opportunities.

46. The consultation approach and pilot projects developed within this project will be used as a model to inform future work in other geographical areas of exclusion.

47. The issue of access to employment and training opportunities will be given further consideration within the review of the bus network being undertaken as part of the Bus Strategy.

### ***Pre-paid Tickets***

48. Cheaper travel is made possible by MetroRover tickets for unemployed people funded on a commercial basis by the operators. The partnership approach taken by Metro, the operators and the Department for Education and Employment has resulted in the MetroRover Scheme being extended to include certain people participating in the Government's Welfare to Work Initiative - New Deal for 18 to 24 year olds. The multi-modal version of the MetroRover ticket was introduced in May 1999.

### ***Women and Public Transport***

49. Although women tend to be the main users of public transport, the different travel needs of women have not always been recognised in the planning and delivery of public transport services. Research has shown that women's experiences of and attitudes to public transport differ from those of men, as do women's priorities in terms of public transport services.

50. The recently published document 'Women and Public Transport: the Checklist' sets out guidance on gender auditing of public transport services for providers and operators as a means of beginning to address the specific needs of female passengers. Metro has used the checklist to conduct a gender audit of current service provision, the results of which are detailed in the attached Appendix 1. The audit highlighted certain areas for further development and these will be addressed as part of the Best Value review and within the development of interchange and safety strategies.

### ***Rural Exclusion***

51. Social exclusion and economic disadvantage in rural communities is, to a large extent, characterised by lack of access to services, affordable housing, and training and employment opportunities. Moreover, rural communities are less likely than urban areas to have access to good public transport services. Measures to improve public transport in rural areas can contribute to social inclusion through tackling problems of accessibility.

52. Metro's Rural Bus team work in partnership with rural communities in planning and developing rural bus services which aim to address the particular needs of those rural communities.

53. Transport issues in rural areas within Kirklees and Calderdale are being addressed by Rural Transport Project Officers. Funded through the Rural Transport Partnership Fund, administered by the Countryside Agency, Project Officers will work in partnership with rural communities to identify unmet transport needs and develop action plans detailing initiatives which aim to meet those needs. Projects may include shared car schemes, taxi vouchers, community buses and other innovative approaches which will aim to improve social inclusion for rural communities.

54. The Denby Dale Rural Transport Project, established through Rural Bus Challenge Competition, enabled capital works to improve social inclusion in the rural Denby Dale area. A complementary initiative has seen the establishment of a Transport Co-ordinator to enable closer links with community and interest groups in the area. The project co-ordinator will facilitate the provision of village orientated travel surgeries, brokerage of unmet travel needs and promotion of public transport including Green Travel issues and the STAG - Safe Travel to School initiatives.

### ***Community Involvement***

55. Consultation during the development of the Local Transport Plan was undertaken on a widespread basis. In order to maximise participation in the consultation process specific additional initiatives were targeted at socially excluded groups. A programme of seminars was used to consult with a range of community and interest groups including access and disability groups, women's groups and older people's groups. Additionally there was a recognition of a need to target 'hard

to reach' ethnic minority groups. A community based market research agency was commissioned to undertake research within ethnic minority communities. The aim of this consultation was to understand the transport behaviour and opinions and analyse the transport needs of the Asian community. This consultation process was also used to inform the Asian community on how they can contribute to strategy development.

56. During the lifetime of the plan, a community consultation and involvement strategy will be developed in relation to specific scheme development. For example, community consultation is a significant feature in the proposals to introduce a priority bus scheme on the busy Kirkstall and Burley Road corridors into Leeds City Centre. The aim of the consultation process has been to maximise community participation through a variety of opportunities for local community involvement and feedback.

57. The consultation and involvement strategy will aim to maximise community involvement and participation in the consultation process through the use of appropriate and inclusive methods.

58. Consultation and partnership approaches will be evaluated to identify good practice in the first 2 years of the Plan and will continue to be developed in new areas in years 3 to 5.

### **FIVE YEAR ACTION PLAN**

59. Existing initiatives aimed at increasing social inclusion through transport planning and implementation are outlined above. We recognise the need to extend and develop our approach to inclusion and this will be done through the development and implementation of a number of strategies and initiatives during the lifetime of this Local Transport Plan.

60. The following action plan sets out a framework for the further development of socially inclusive transport planning and provision; describing initiatives which aim to fulfil the objectives laid down within this strategy. Some of the following initiatives will be implemented on a countywide basis, with others being brought forward within individual districts. District based initiatives will be evaluated and used as models of good practice to be shared countywide.

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Strategy Development and Implementation</u>	
Continued partnership with operators to implement the Access Strategy	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Partnership</li> </ul>
Development of a strategy for safety and security which takes into account the needs of socially excluded individuals	<ul style="list-style-type: none"> <li>• Personal Safety and Security</li> </ul>
Development of a community consultation strategy	<ul style="list-style-type: none"> <li>• Community Involvement</li> </ul>
Development of an audit for transport schemes to assess the social impact on excluded groups, communities and individuals	<ul style="list-style-type: none"> <li>• Transport Impacts</li> </ul>

Development of planning guidelines to assist developers to take account of public transport facilities within the planning of new developments	<ul style="list-style-type: none"> <li>• Planning Issues</li> </ul>
Development of the West Yorkshire Access Strategy for Highways and Transportation. The access strategy will complement other existing strategies such as the pedestrian and public transport access strategies	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Review and Evaluation of Existing Initiatives</u>	
A review of the West Yorkshire concessionary fares scheme, as part of the Best Value review, will examine the benefits of the scheme to older people and people with a disability	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Opportunities for providing good value pre-paid tickets which are affordable to low income households will be examined to ensure the benefits of pre-paid tickets are available to the whole community	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Community Involvement</u>	
Development and implementation of a community consultation and involvement strategy	<ul style="list-style-type: none"> <li>• Community Involvement</li> </ul>
Development of social inclusion strategy holistically within Wakefield district Community Plan and, in doing so, link social inclusion and transport planning of rural services supported by the Rural Bus Grant	<ul style="list-style-type: none"> <li>• Community Involvement</li> </ul>
Rural communities will continue to be consulted and actively involved in the planning of rural services supported by the Rural Bus Services grant	<ul style="list-style-type: none"> <li>• Rural Development</li> <li>• Community Involvement</li> </ul>

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Partnership Working</u>	
Development of links to regeneration initiatives in order to improve the number and quality of transport initiatives within SRB and Objective 2 regeneration schemes	<ul style="list-style-type: none"> <li>• Economic Regeneration Development</li> </ul>
Development of links to Crime and Disorder Partnerships; aims to integrate transport policies in local strategies to tackle crime	<ul style="list-style-type: none"> <li>• Personal Safety and Security</li> </ul>

Liaison with operators to provide accessible buses for accessible routes and corridors	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Partnership</li> </ul>
Establishment of a West Yorkshire Mobility Planning Group. The group will be used to set standards for design and service provision and to be used to consult on policies and accessibility standards identified through the Access Strategy for Highways	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Partnership</li> </ul>

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Infrastructure Improvements</u>	
Various schemes to implement bus, cycling and pedestrian facilities, improving accessibility and personal safety	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Personal Safety</li> </ul>
Various schemes to improve accessibility of pedestrian crossings, key access routes and bus stops	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Development of accessible routes and corridors	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Five bus stations to be brought up to DDA standards of accessibility	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>

<b><i>Initiative</i></b>	<b><i>Objectives</i></b>
<u>Soft Measures</u>	
Provision of premises within the redeveloped Bradford Interchange for a Shopmobility shop and involvement in the running of the shop	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Bradford Council Mobility Planning Group is involved in a number of initiatives including city/town centre accessibility audits, a door-to-door transport audit, improved driver training courses for door-to-door services including taxis, taxi voucher scheme, review of the Orange Badge system	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Supporting and encouraging disabled people to use existing and newly accessible public transport, involving community workers and occupational therapists working with disabled people to increase confidence and knowledge around the use of public transport	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Partnership</li> </ul>
Wheels for All project, funded through EU Target Project and Health Action Zone funding, aims to encourage and give opportunity to disabled people to have a go at cycling	<ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Partnership</li> </ul>
Marketing of accessible bus routes	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Publication of the Go For It Guide; providing comprehensive information about the accessibility of local public transport facilities and services	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>

Disability awareness training for drivers on accessible routes	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
Free accessible minibus/ accessbus service within the public transport box in Leeds. This will provide an alternative to walking to access shops and services in the large pedestrianised central shopping area of Leeds within the public transport box, and will provide a link between bus and train stations in Leeds	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>
TARGET (European funded) Teleworking project aims to improve accessibility of work through piloting of new flexible working practices	<ul style="list-style-type: none"> <li>• Planning Issues</li> <li>• Accessibility</li> </ul>
Audit of transport strategy to ensure that issues relating to women and transport are identified and addressed	<ul style="list-style-type: none"> <li>• Accessibility</li> </ul>

<i><b>Initiative</b></i>	<i><b>Objectives</b></i>
<u>Targeting</u>	
Development of the use of GIS social mapping to identify and target transport initiatives aimed at promoting social inclusion in disadvantaged areas	<ul style="list-style-type: none"> <li>• Transport Impacts</li> </ul>

### PROJECT LINKED INDICATORS

61. We are developing a number of indicators which will be used to measure the success of the initiatives detailed within this plan. Indicators will include:

- accessibility of bus fleets;
- accessibility of bus stations and mini-interchange points;
- accessibility of railway stations;
- accessibility of bus stops facilities and the surrounding environment;
- provision at controlled crossings;
- number of injuries/fatalities in given geographical area relative to its Index of Local Deprivation;
- adjustments to the Plan, over its lifetime, as a result of consultation and involvement of key socially excluded groups;
- leverage of money for transport improvements within neighbourhood regeneration schemes;
- number of district regeneration programmes with a transport theme.

62. Further indicators will be developed as projects proceed, and will be detailed in future annual progress reports.

### INTEGRATION AND LINKAGE ACROSS PLAN

63. Social inclusion issues have been identified within this chapter and specific measures have been developed to address these issues over the life of the Plan across the County. The approach identified within this plan is to mainstream these



developed measures within relevant areas of the Plan, e.g. implementing the access strategy within the highway maintenance work. Social inclusion issues have been integrated across the plan wherever relevant and within main transport planning processes; this integration process will be strengthened throughout the lifetime of the plan. Links between policy development and addressing social inclusion are described in the relevant topic strategies.

## **SUSTAINABLE DISTRIBUTION OF FREIGHT**

### **BACKGROUND**

1. Moving goods sustainably is a key element of the national integrated transport policy set out in 'A New Deal for Transport: Better for Everyone'. In March 1999 the DETR published the daughter document for freight, 'Sustainable Distribution: A Strategy'. This document sets out the Government's objectives and detailed measures that will be pursued including changes to national and European policies and legislation and financial and taxation regimes. It also provides considerable statistical information.
2. Being able to transport goods efficiently is essential to support economic vitality. Freight matters are addressed in the Regional Innovation Strategy and are being progressed through a Freight Industries Innovation Board and a Food Industries Board. Yorkshire Forward, the regional development agency, is supporting this work.
3. Within West Yorkshire economic considerations have several different emphases. The former coalfield areas once relied heavily on rail, and to a lesser extent waterways, for transporting coal between the pits and power stations and as such highway infrastructure is deficient in these areas. This is recognised in the June 1998 report by the Coalfields Task Force. Regeneration initiatives for these areas are now seeking to attract inward investment and diversification but success will be dependent on ensuring high levels of accessibility for the transportation of goods by a range of modes. Similarly other areas have suffered decline through the loss of traditional industries and are seeking to promote regeneration. At the other end of the spectrum some areas are experiencing high levels of economic growth which is creating different transport problems that need to be addressed if this growth is to continue.
4. West Yorkshire is strategically located in relation to the motorway network (M1, M62 and A1), the East Coast Main Line and Trans Pennine rail line, and commercial waterways. There is therefore potential for promoting a multi-modal approach to transporting freight.

### ***Road Freight Problems And Opportunities***

5. Road freight has for many years now been widely considered to be the most flexible means of distributing goods, particularly with the trend towards "just in time" deliveries. The drive for competitiveness within an increasingly global economy has meant that producers have sought to expand their markets. As a result road freight has been growing significantly but this is primarily due to increases in the distances that goods are being carried rather than in the total amount of goods, which has remained fairly constant. To change this trend would require policy action at national, European and international levels. Without this local actions to manage demand could simply disadvantage local companies or cause them to relocate.
6. The continued growth in overall vehicular traffic has resulted in increasing problems of congestion and pollution. The transportation of goods by road is both suffering from and contributing to these problems. Whilst there is potential for using rail and waterway as alternative transport modes, the patterns of land use and distribution networks that have developed are such that the lorry is likely to remain the principal means of distributing freight. Within West Yorkshire there are large volumes of lorry traffic using the inter-urban and urban local highways and the trunk roads and

motorways. This traffic comprises both that generated from within this sub-region and large volumes of through traffic.

7. It has to be recognised that the majority of destinations for goods are shops and other premises that lie within built up areas for which road-based delivery is the only option. In newer developments the facilities for achieving access for deliveries are generally incorporated but perhaps the majority of deliveries rely on access direct from the street. On the one hand hauliers and businesses experience delays and unreliability from congestion and difficulties in being able to park for loading and unloading. On the other hand residents, workers, shoppers and other visitors suffer the noise and visual intrusion and even obstruction and intimidation caused by the presence of heavy lorries.

8. Such problems have been studied and potential solutions examined in a report that has been published jointly by the Freight Transport Association and the Local Government Association entitled *Delivering The Goods*. Following the piloting of several partnership initiatives a list is included of a range of possible measures that can be adopted to promote best practice in urban distribution. From this list a number of suggestions are considered to be appropriate (some in combination), together with various other proposals, and these are included below in the strategy measures that are to be progressed.

### ***Rail Freight Problems and Opportunities***

9. The rail freight market has suffered decline until recently, seeing a fall in the total national tonne-kilometres per year from around 17 billion throughout the 1980s to around 13 billion in 1995. Measured by freight lifted the decline was even worse, from around 150 to 100 million tonnes over the same periods. This has been principally due to the decline in rail freight's core market of transporting coal for power generation and so is of particular significance in this region. This decline has resulted in the loss of many all-purpose sidings thus reducing the opportunity for rail freight.

10. The 1993 Railways Act provided the framework for privatising freight services but to date there are just two private licensed freight operating companies. English Welsh and Scottish Railways (EWS) is the main national operator, and Freightliner transports containerised goods. Direct Rail Services is a publicly owned company (British Nuclear Fuels Limited). EWS have achieved a 40 percent increase in tonne-kilometres between 1995 and 1999 and aim to achieve further significant increases. Because of the decline in traditional markets it will be necessary to broaden the customer base. Freightliner aim to increase the volume of containers carried nationally by fifty percent over five years.

11. The region has two major rail freight terminals, Wakefield Europort in Normanton and Freightliner in Stourton, Leeds. There are a number of sidings that are operated by private companies, some of which handle significant volumes. There are also sites where connections and signals remain but are not in use, and there are seven strategic freight sites defined by the Railways Act.

12. Wakefield Europort opened in 1996 and is located adjacent to junction 31 of the M62. It is owned by the City of Wakefield Metropolitan District Council and operated by EWS. This is one of the locations chosen nationally to ensure that the regions would benefit from the Channel Tunnel and it provides a daily timetabled service to Europe. The main products being carried are bulk steel, some foods and electrical goods. Rail freight traffic using the Channel Tunnel has not reached its anticipated throughput levels.

Growth in European rail freight traffic will also be dependent on the extent to which European rail operators expand their services into England. Wakefield Europort has been developed in conjunction with some 350 acres of new industrial land, in addition to the longer standing industrial estates located around junction 31 of the M62. The Aire and Calder Navigation is in close proximity and so there is also potential for freight transfer between road, rail and waterway at this location.

13. The Freightliner terminal at Stourton is located close to junction 7 of the M621 (formerly the M1) and junction 44 of the M1 (on the new M1-A1 Link). It has been in existence for many years and provides a transfer facility for containerised goods to and from the deep-sea ports. It currently handles some 85,000 containers per year, which represents a significant proportion of the area's intercontinental imports and exports. There is still potential for further growth at Stourton through investment in new equipment and by updating operating techniques, but it is also important that land for development and redevelopment in the vicinity remains available for terminal related uses. The Aire and Calder Navigation is in close proximity and so there is possibly potential for freight transfer between road, rail and waterway at this location.

14. EWS, Freightliner and Direct Rail Services, have all embarked on programmes to acquire new and refurbished rolling stock in order to seek new business. The Government has also significantly increased the funds available for Freight Facilities and Track Access Grants. The projected growth in rail freight will add to the competition for use of the network. Overall capacity, the speed differentials between freight and passenger services, and the loading gauge are particular problems on the East Coast Main Line.

15. The cost of using rail is still in many instances too high to encourage a transfer from road, and track access charges are increasing. Other problems are that there is a need to make additional paths available on the network and the reliability of rail freight services needs to be improved. The recent decision by the Government to allow 44 tonne lorries to operate within the United Kingdom is widely regarded by the rail freight industry as potentially damaging not only to the prospects for growth but indeed to existing rail freight markets.

### ***Waterway Freight Problems and Opportunities***

16. Waterway transport is one of the most environmentally friendly transport modes, having low emissions, low noise, low visual intrusion and energy efficiency. Vessels on Inland Waterways may travel slower than road but they are not subject to congestion and have the benefits of economies of scale and reliability. Thus they can, for many products, form part of an efficient logistics supply chain.

17. In the recent past transporting coal for power generation was one of the main markets served by the waterways of the Region but this market has been in decline. Other markets include oils and aggregates. Only recently an oil terminal at Woodlesford in Leeds was upgraded with the aid of a Freight Facility Grant from DETR, which allowed the transportation of petroleum spirit, by water to return to the site after a number years.

18. There are within West Yorkshire important lengths of commercial and cruising waterways that form part of a network linking the Region to the East Coast and beyond. The Aire and Calder Navigation provides access from the East Coast Ports via

Ferrybridge, Knottingley and Castleford to Leeds and is capable of accommodating barges up to 600 tonnes carrying capacity. The Navigation branches at Castleford allowing vessels up to 250 tonnes carrying capacity to navigate to Wakefield. The Calder and Hebble Navigation runs from Wakefield to Dewsbury and Halifax where it joins the Rochdale Canal. The Leeds and Liverpool Canal runs westward from Leeds into Lancashire.

19. In recent years there has been a growth in leisure boating with investment in new marinas and facilities at moorings, along with a move towards multi-use of the waterways. However it is not considered that there should be any major conflict of interest between commercial and leisure interests as freight may be carried on cruising waterways where appropriate, having regard for safety, heritage, feasibility, the environment and impact upon other waterway users.

20. Approximately 1.5 million tonnes of freight was moved in 1999/2000 by private sector carriers on the waterways under British Waterways control in the Region. British Waterways are continuing their marketing efforts to encourage increased use of their waterway network, where appropriate, for freight and leisure purposes.

### **THE SUSTAINABLE FREIGHT DISTRIBUTION STRATEGY**

21. The sustainable freight distribution strategy is being developed and progressed through a Freight Working Group that has been established for West Yorkshire, involving representatives of the infrastructure providers and users. The strategy is based on three main themes:

- making better use of existing national and local roads, rail and waterway infrastructure and for ensuring that deficiencies and problems are identified and resolved with new provision being made where appropriate;
- transferring more goods from road to rail and waterway;
- improving the operation of deliveries within town and city centres and communities, both for business efficiency and for improving safety and the environment.

22. The strategy will have to address a number of significant barriers to progress:

- there is a lack of knowledge and awareness of freight issues such as grant regimes, both within the industry and transport authorities;
- the current dominance of road as the means of transport adopted by industry and business presents a major barrier of attitude and expectation;
- as most goods transport will always require the use of lorry or van at one or both ends of the journey, the need to transfer goods between modes when using rail or waterway imposes a further cost;
- the capacity of the rail network is severely limited and this results in a conflict of interest between passenger and freight services, particularly since the aim is to increase passenger train frequencies and speeds, especially on the East Coast Main Line and Trans Pennine route;
- there is spare rail capacity during the night but this can cause environmental problems where lines are close to residential areas;
- the high capital cost of providing new interchange infrastructure;

- the availability of suitable land in strategic locations for inter-modal facilities.

23. The measures that comprise the sustainable distribution strategy are detailed as follows:

***Making Better Use of Existing Infrastructure and Providing New Infrastructure***

- Heavy through traffic is a problem for certain centres and communities. Traffic management measures to restrict movements and encourage use of alternative routes will be investigated through a systematic approach for the whole network.
- In the absence of suitable alternative routes, the promotion of new road construction schemes such as relief roads or bypasses may be the appropriate way of removing through movements of heavy goods vehicles from communities, or improving goods vehicle access by reducing other general traffic. There are several proposals for major highway schemes in West Yorkshire and in assessing the justification for each of them and their relative priority their role in resolving any problems associated with road freight or improving accessibility for goods will be a major factor.
- the strengthening and maintenance programme for highway structures, including the imposition of weight restrictions, will take account of the need to manage the routing of lorries;
- The Highways Agency is developing a Route Management Strategy for the M62. The Government Office for Yorkshire and the Humber is leading in the multi-modal studies for West and South Yorkshire (Motorway Box). Some of the measures being examined include the introduction of priority measures for goods vehicles on some sections of the trunk road network;
- identify and sign a 24-hour lorry network complemented by signing to key destinations, working with such as major distributors and power generators;
- produce maps and an Internet site with information about lorry access restrictions, physical restrictions and the 24-hour network;
- adopt measures for improving goods access to Leeds and Bradford Airport emerging from the Surface Access Study.

***Freight Transfer From Road to Rail and Waterway***

24. The Road Haulage Association (RHA) includes in its membership the vast majority of larger companies. Work by the RHA has established that the key issues that need to be considered by industry in making modal choices are availability, reliability, flexibility, security, speed and cost. To achieve a transfer from road to rail and waterway the following measures are proposed:

- assessment of rail freight facilities and opportunities based on the sites scheduled in Railtrack's guide to freight connections to determine the scope for expanding the use of operating sites and the re-opening of non-operating sites;
- identify rail lines, sidings and associated infrastructure and the land owned by BRB that it proposes to sell off that should be safeguarded for future rail freight initiatives;
- identify waterways facilities that are no longer in use and consider which are

appropriate to safeguard for future use;

- identify the commercial waterways routes and related infrastructure that could form the basis for developing interchange and Inland Ports by providing or improving access;
- consider with industry the role of urban distribution centres;
- integrating the road network with major freight transport interchanges, considering both road access to existing facilities and the potential for new interchange facilities through public-private partnerships;
- work with EWS and Freightliner to determine growth targets for rail freight in West Yorkshire and ways in which local authorities can help to achieve them;
- work with British Waterways to determine growth targets for waterborne freight in West Yorkshire and ways in which local authorities can help to achieve them;
- streamline and clarify the process for obtaining information and guidance on how companies can transfer from road to rail or waterway to influence the location and modal choice of companies through the Centre of Excellence proposal to produce a handbook to promote suitable sites;
- promote the formulation and adoption of Travel Plans by business and industry (to include deliveries and goods transport);
- promote the use of existing freight transfer facilities both by companies within West Yorkshire and to intercept through traffic.

### ***Improving Deliveries in Urban Centres through Freight Quality Partnerships***

25. This is a process that will be increasingly used as a means of identifying the problems and issues that are specific to a particular location such as a town centre, and then to devise appropriate solutions by facilitating active participation by all the appropriate parties. The principal difficulty experienced so far is that there is potentially such a large number of different parties (Local Authorities, Police, hauliers, businesses and industries, residents, civic and environmental organisations, etc.) and there is a lack of established liaison arrangements.

26. In Leeds a pilot initiative has been started as a possible means of overcoming these difficulties. The approach adopted is for the Local Authority, the Freight Transport Association, the Road Haulage Association and the Chamber of Commerce to act as representative bodies to identify the issues within a defined area and the individual parties with an interest that need to be involved. Action plans can then be developed that propose schemes and measures, define the responsibilities for implementing them, and identify sources of funding. The Local Authority will be responsible for co-ordination.

27. The types of measures that might be included in an action plan are typically similar to those set out in Delivering The Goods and are as follows:

- address public perceptions about lorries in urban areas, especially for such as night time and early morning deliveries through the deployment of quieter vehicles and driver education;

- review the controls such as Traffic Regulation Orders that are currently in place in West Yorkshire that affect the delivery of goods and relax them where possible (for this to be acceptable it may require certain good practice measures to be adopted by the industry, with trial schemes if necessary);
- where loading and unloading has to take place from the kerbside ensure adequate protection is given through the provision of bays and enforcement to protect against illegal parking;
- consider how lorries can be given greater priority access to town centres through such as the shared use of priority lanes or other forms of reallocating road space, and incorporating selective detection in Urban Traffic Management and Control systems;
- ensure there are adequate, properly located lorry parking and servicing facilities;
- work with companies and operators to include freight as an issue to be addressed in developing Travel Plans, including an encouragement to use alternative fuels.

## **RELATIONSHIP WITH DEVELOPMENT PLANS AND ECONOMIC DEVELOPMENT**

28. Whilst the Local Transport Plan sets out the strategies for meeting transport objectives, the Unitary Development Plans of the five West Yorkshire District authorities contain the statutory policy framework. There is also a statutory duty placed on each authority to have an Economic Development strategy.

- review UDP policies to strengthen the emphasis on sustainable distribution;
- incorporate existing and proposed interchanges (including sidings) on proposals maps;
- carry out a proposed research project by Huddersfield University in conjunction with Wakefield TEC / FTA / EWS into an economic assessment of the transport and associated activities sector including a mapping of the movement of goods from Wakefield to Europe.

## **TARGETS, INDICATORS AND MONITORING**

29. The following targets and indicators have been identified:

- contributions to Road Traffic Reduction Act (targets for HGVs);
- contributions to action on climate change and local air quality management;
- Freightliner aim to increase the volume of containers carried nationally by fifty percent over five years;
- EWS aim to significantly increase the amount of freight carried by rail;
- waterway freight growth targets to be developed.

## **REFERENCES**

Sustainable Distribution: A Strategy ([www.detr.uk/itwp/susdist/index.htm](http://www.detr.uk/itwp/susdist/index.htm))

Handbook on Sustainable Freight Distribution (West Yorkshire Centre of Excellence)

Delivering The Goods (FTA / LGA)



## A New Deal For Transport: Better For Everyone

## APPENDIX

### PILOT INITIATIVE FOR URBAN DISTRIBUTION IN LEEDS

#### ***Background***

A1. In response to the New Deal for Transport and the daughter document, *Sustainable Distribution: A Strategy*, and the research into promoting Freight Quality Partnerships, Leeds City Council is piloting a partnership arrangement to improve urban distribution within Leeds City Centre. The aim is to take on board views from all parties to agree on courses of action that will resolve identified problems and work towards achieving more sustainable freight distribution via quality partnerships.

#### ***Progress***

A2. The problems related to servicing in the City Centre have firstly been investigated by City Council officers, involving Traffic Management, UTC, Divisional Offices and City Centre Management.

A3. To date it has been noted that regular problems occur in association with the activities of two companies and they are being approached to discuss the problems directly and gain their perspective.

A4. Where problems relate to delivery companies they are being approached via the FTA or RHA. In the pedestrian precinct areas the problems can be summarised as:

- staying too long and causing an obstruction;
- infringement of one-way streets to avoid such obstruction;
- opening the Briggate gates to gain access during the restricted period;
- gates being left open leading to further abuse;
- the size of vehicles used to service the City Centre.

#### ***Pilot Measures***

A5. Implementation of a City Centre strategy is well advanced. This comprises the provision of an inner Public Transport Box and a City Centre Loop. Any vehicles needing to access the City should do so from the City Centre Loop and any with no destination in the City Centre should use the Inner Ring Road. This creates the possibility for better management of traffic within and around the City Centre.

A6. Measures that are being considered include:

- carry out surveys of existing lorry and van movements in the City Centre to determine the actual need for access and the potential for redirecting traffic;
- designate and sign servicing areas off the Loop identified by name, number or possibly colour;
- produce and distribute publicity advising of the servicing areas;
- designate and sign advisory HGV routes around the City Centre;
- negotiate with map companies to have information included;

- introduce electronic routing systems including servicing information;
- progress an application for Special Parking Area Status for decriminalised parking enforcement to assist deliveries by targeting problem areas where cars park illegally blocking servicing areas or kerb space used for loading.

A7. Outside the City Centre, the East Leeds Link is a major scheme proposal to connect the Inner Ring Road Stage 6 and the M1/A1 Link. The current proposal for a dual carriageway is being reviewed. One of the options being tested is for one of the lanes in each direction to be designated as a PSV/HGV lane.

### **OIL PRODUCTS TO WOODLESFORD BY WATERWAY**

A8. In July 1999 Bayford Thrust opened its refurbished oil storage terminal at Woodlesford, near Leeds, adjacent to the Aire and Calder Navigation.

A8. The terminal was refurbished with the aid of a Freight Facility Grant from the Department of Environment, Transport and the Regions, together with investment by Bayfords. The project included:

- refurbishment of the barge discharge facility
- installation of a computer controlled bottom loading system for road vehicles
- installation of a remote tank monitoring system
- upgrading of the security system at the terminal.

A10. The new terminal is supplied with petroleum products by barge via the navigation and is expected to receive up to 200,000 tonnes of oil products by waterway over a five year period. Each barge can carry the equivalent of twenty lorry loads and the operation will save up to 16,000 tanker journeys by road over the five year period.

A11. The initiative was supported by British Waterways who manage the navigation. The facility was opened by the Transport Minister, with the event receiving much media interest.

## **HIGHWAY MAINTENANCE STRATEGY**

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### **LINKS TO OTHER DOCUMENTS**

See LTP Appendix for Detailed Five Year Programme

See LTP Appendix for Schemes Over £250,000

See LTP Appendix for Projected Revenue Budget

See Annual Progress Report for Completed 1999/2000 Programme

See Annual Progress Report for Impact Assessment of 1999/2000 Schemes

See Annual Progress Report for 2000/2001 Programme (capital and revenue)

See Annual Progress Report for Detailed Performance Monitoring

### **VISION**

1. The condition of the network in West Yorkshire has generally been deteriorating over any years. Our vision is to reverse this trend, improving the riding quality and safety of the highway surface and increasing its structural strength to a level which compares with the top 25% of highway authorities, while co-ordinating schemes with other highway initiatives to achieve the maximum benefit from the investment of maintenance money.

### **OBJECTIVES**

2. The West Yorkshire Districts have engaged their stakeholders in developing the objectives for the maintenance of the Highway Network. Each District's aim is to deliver the highway maintenance service the public expect. Democratic Renewal has been embraced as a means of engaging Members and the public in discovering the aspirations and needs of road users.

3. The objectives for carriageway maintenance have been agreed as:

- to improve safety;
- to improve the strength of the carriageway;

- to promote accessibility;
- to contribute to an efficient economy;
- to promote integration;
- to protect the environment.

## **STRATEGY SUMMARY**

4. The strategy to achieve each of our objectives is:

### *Improving safety by:*

- implementing proactive policies to identify defects and carry out resulting safety and routine maintenance repairs;
- implementing responsive policies to repair roads and pavements when stakeholders raise concerns, including repairing pavement trips and filling in potholes within 24 hours;
- reducing the percentage of the network failing SCRIM investigatory levels over a period of five years;
- collecting UKPMS condition data for all of the network over a period of five years and carry out maintenance to all sites with a condition index in excess of 70;
- the creation of a safer and more inviting environment for pedestrians and pedal and motor cyclists (and to provide specific facilities and features in schemes) by promoting the maintenance of pavements and the strip at the edge of the road.

### *Improving the strength of the carriageway by:*

- monitoring the structural condition of the network and carry out maintenance to arrest deterioration and ensure, where applicable, that the network will continue to be able to carry heavy traffic flows;
- managing the network asset to ensure that strengthening work is carried out at the right time to minimise the whole life cost of maintaining the infrastructure;
- reducing the percentage of the network with negative residual life to 10% over a period of five years.

### *Improving accessibility:*

- improving access for disabled people, for example by the inclusion of dropped kerbs at main crossing points and raised kerbs at bus stops whenever maintenance work is carried out.

### *Contributing to an efficient economy by:*

- creating an attractive, well maintained highway environment through the promotion of good maintenance policy, to contribute to urban renewal and to help attract new businesses to industrial and commercial areas which are increasingly showing signs of dereliction;
- implementing maintenance designs which are appropriate to the style of the area and which will help to promote tourism by the enhancement of the street scene.

### *Improving integration by:*

- co-ordination with road safety schemes, bridge and wall maintenance and public transport initiatives;
- giving significant bus routes priority in the allocation of funds for structural maintenance and integrating maintenance with schemes for the provision of bus lanes, gateways and guideways.

*Protecting the environment by:*

- using appropriate materials to complement the appearance of West Yorkshire Conservation Areas when works are carried out;
- using maintenance treatments which reduce the long-term reliance on quarrying new materials, disposing of existing materials to landfill sites and minimise the use of road transport of construction materials.

5. To ensure the effectiveness of all aspects of the full LTP, the objectives and strategy set out above apply not only to the Principal Road Network where maintenance is funded through the settlement, but also to the District roads maintained from revenue funding.

## **PROBLEMS AND OPPORTUNITIES**

### ***Problems***

6. The network is in such a condition that making sure that we achieve best value from the funding available is a major challenge. Short-term solutions may have to be adopted where funding is not available for long term resolution of problems.

7. Bus and HGV traffic flow on the network continues to increase, albeit slowly, causing increasing damage. In addition, the recent increase in HGV axle weights to 40 tonnes over five axles with a maximum axle load of 11.5 tonnes creates a disproportionate increase in the stress on the road structure.

8. Utility company street works openings and reinstatements continue to be a major cause of structural damage to the highway network. The large number of telecommunication companies being granted Government licences to install new networks causes particular problems. There are still high rates of reinstatement failures of utility trenches. The effect of so many damaging openings (and failures) is to create the appearance of a poorly maintained network, to dramatically increase the rate of deterioration and reduce the life of the road.

9. Potholes in the road and trips in the footway can cause damage, injury, pain and suffering. They can also be costly both in terms of the handling and settlement of litigation claims and the cost to the community of medical care and lost time to employers.

10. Increasingly the street scene is being developed with high specification materials and casualty/speed reduction features. Some of these features are vulnerable to impact and have a relatively short life. A high standard of maintenance is required to ensure that special features continue to perform their intended purpose. For example channelling heavy wheel loads concentrates the damage.

### ***Opportunities***

11. The maintenance strategy has been specifically developed to support the full Plan:

- to including specific measures as an integral part of maintenance schemes;
- to maintain features introduced through improvement schemes;
- to give consideration during the design of schemes to making the route more attractive to public transport, cyclists and pedestrians. This includes measures such as bus and cycle lanes, specific crossing points, advanced stop lines at traffic signals and cycle friendly gully grates;
- to providing additional space where possible to accommodate buses, pedestrians and cyclists;
- to give specific consideration to routes used for journeys to schools.

12. Examples of how such co-ordination has been achieved in practice are included in the progress report.

13. Opportunity is taken in the design phase of maintenance schemes to liaise with all interested parties and co-ordinate work with other proposals, including utility company works.

14. An important factor when carrying out works is to assess all the existing street furniture to ensure that it is necessary. If not it is removed to increase available pavement width for those with mobility impairments, clear obstructions for those with impaired vision and not least to reduce clutter.

15. The safer an individual feels in an environment, the more likely will be choice of a sustainable mode of transport. A well-lit environment will encourage people to walk, cycle or use public transport. For example access to and links between public transport interchanges need well maintained, quality lighting. The opportunity to provide suitable lighting is an integral part of maintenance design.

## **LONG TERM STRATEGY**

### ***Consultation***

16. A range of mechanisms has been adopted for the stakeholders (public, specialist groups such as cyclists, Freight Transport Association, the disabled and partners such as the Police, Transport Operators etc) to contribute to developing strategies and priorities.

17. The whole Highway Maintenance activity is undertaken within a Best Value framework, including fundamental performance reviews.

18. The speak out panel in Bradford is a group of about 2500 individuals (0.5% of the population) who are selected to represent the demographic mix of the district from a much larger pool of people who are prepared to participate. They answer questionnaires at home on a range of issues. A survey done in February 1997 ranked street lighting, road and footpath maintenance and refuse collection as the most important services, above schools, nursery education and social services. Rapid response to emergency repairs, regular monitoring and maintenance and ensuring

quality of workmanship were seen as key issues. Similar results were experienced during consultation on the Leeds Vision.

19. In Calderdale and Kirklees the widest possible range of stakeholders were engaged, using panels and questionnaires to determine concerns, rank their priority and develop Performance Indicators and targets for highway maintenance activities.

20. In addition to identifying the most important activities a theme was recognised running through all the activities that stakeholders want to be able to report problems easily, have their concerns investigated and receive an explanation of what is proposed and when any necessary work will be carried out.

21. To enable the public to contact the Highway Maintenance Units initiatives such as 'one stop' shops and call centres are provided across the County. Also, an intranet service is being developed for the public to report problems from any Council Office in one District.

22. However the challenge facing all the Districts is to balance the need to keep the network safe and respond to the public's reasonable expectation that minor defects will be made safe quickly against the need to preserve the strength of the network by carrying out reconstruction schemes. The strategy across the County has been developed to achieving this fine balance within the available budget.

### **Network Definition**

23. The network lengths shown in Table 1 will be maintained from the Local Transport Plan settlement.

<b>District</b>	<b>Principal Road Length (including Primary Routes)</b>			<b>Primary Route Length</b>	<b>Non-core Trunk Road</b>
	<i>Urban</i>	<i>Rural</i>	<i>Total</i>	<i>Total</i>	<i>Total</i>
Bradford	115km	21km	136km	40km	37km
Calderdale	66km	48km	114km	56km	24km
Kirklees	157km	81km	238km	49km	3km
Leeds	145km	88km	233km	127km	53km
Wakefield	77km	70km	147km	53km	nil
<b>Total</b>	<b>560km</b>	<b>308km</b>	<b>868km</b>	<b>325km</b>	<b>117km</b>

*Table 1: Principal Road Lengths*

24. These roads form an essential part of the regional and national road network, linking major cities, towns and industrial and commercial centres to the national motorway network and other centres outside the region.

25. In addition, a significant part of the trunk road network is defined as non-core and is being transferred to local authority control. The management of the maintenance of these roads will be covered by the strategies and systems established for the maintenance of the Principal Road Network. In view of the proposed interim funding arrangements, no account is taken of the non-core trunk road in the current bid. However, this will be a short term measure and when the details of the condition of the



roads are released by the current maintenance agents the long term investment plans will be reviewed.

26. Although funds are provided from each District's revenue budget and traffic flows are generally lower, similar principles are used in determining maintenance policies for non-principal roads. However the local pressures and influences are greater and as they were constructed to lower standards they are more susceptible to damage by heavy vehicles such as buses.

### **Condition Assessment**

27. Consistent, reliable, comparable condition data is an essential foundation for the joint strategy.

28. The need for a systematic approach to highway maintenance is promoted by the Highway Maintenance Code of Good Practice. This requires that the network, quality standards and maintenance policies are clearly defined and consistently applied. Although the Code needs considerable updating in line with developments in highway maintenance practice, it has been adopted, where still applicable.

29. Funding levels are insufficient to implement the standards defined in the Code and systematic prioritisation is therefore an essential element to work programming.

### National Road Maintenance Condition Surveys (NRMCS)

30. With the transition from Compulsory Competitive Tendering to Best Value, the need to be able to measure and compare performance, both between authorities and generally against a national base line is increasingly important. We support the National Road Maintenance Condition Survey (NRMCS), both with the submission of visual condition data and more recently with deflectograph and scrim data.

### UK Pavement Management System (UKPMS)

31. Preparations are well advanced for implementation of Tranche 2 UKPMS across West Yorkshire. This is a welcomed major development and very close joint working between authorities is now part of the regular routine, for example in ensuring a consistent approach to, survey strategy and interpretation of the rules and parameters.

32. Four of the five Districts are MARCH PMS users and although the other has only recently chosen another PMS provider all are committed to adopting the policies and standards of UKPMS, sharing expertise and knowledge on a day-to-day basis.

33. Each Authority has, historically, collected condition data and all are now collecting visual condition data for Course Visual Inspections (CVI) and Detailed Visual Inspections (DVI) in accordance with the UKPMS national rules and parameters.

34. The details of the surveys are:

- Visual Condition CVI and DVI to UKPMS
- Deflectograph strength Assessment 3-5 year cycle - PANDEF
- Skid resistance 1-3 year cycle - SKID

35. Preparations are well advanced for the full implementation of UKPMS. WAYLEN files are being prepared for computer data analysis and network inventory for the Principal Road Network has been adapted to conform to UKPMS requirements.

36. In addition all the Principal Road networks are subject to regular safety inspections to identify defects which may lead to trips, damage to vehicles and result in third party claims.

#### Network Condition

37. Visual condition assessments confirm that maintenance is required on a significant proportion of the network. This is based on analysis against Highway Maintenance Code of Good Practice intervention levels built onto MARCH assessment systems, and, latterly, UKPMS rules and parameters.

38. The deflectograph surveys carried out by nearly all the Highway Authorities in England show that an average 15% have no residual life. However in West Yorkshire even the best is 27% and the worst is 51% Full results are given in the Annual Progress Report.

39. Where SCRIM results are available these have been considered in two categories. The risk of motorists losing control on the layout of some 70% of the network is low and the recommended investigatory level is 0.40 or less. Less than 15% of this part of the network has an unsatisfactory skid resistance.

40. However, on bends, the approach to junctions and other similar locations, where a greater skid resistance is required, more than 60% locations fail the investigatory level. Full analysis is given in the Annual Progress Report.

41. Network condition is an ever varying situation. As certain roads are brought to standard, others are deteriorating below an acceptable level and it is recognised that there will never be a zero maintenance requirement. However assessment results indicate that the West Yorkshire network is well below the national average condition.

42. In setting objectives to improve the network condition it is agreed that the following condition standards should be achievable given an appropriate level of funding.

43. First, in addressing the need for a safe highway surface, and recognising that the public are concerned about visual defects rather than network strength, carriageway defects over 40mm deep and footway defects over 20mm should be dealt with within 24 hours of being identified and areas should be treated before they reach a UKPMS Coarse Visual Inspection score of 70. All carriageway surfaces should have a skid resistance at or above investigatory level.

44. In balancing the above with the need to improve the structural strength of the carriageway network it is agreed that the backlog of strengthening work identified by deflectograph surveys, should be reduced to less than 10% of the network length.

#### ***Maintenance Priorities and Scheme Selection***

45. The experience gained in the maintenance of the Principal Road Network, together with a study of the impact of previous years expenditure, has generated a common view that future works need to balance expenditure between surface treatment, resurfacing and reconstruction to produce a long term improvement in the strength of the network while still addressing preventative maintenance and routine safety work.

46. At present a "worst first" Tranche 2 system is adequate to prioritise the extensive lengths of the network with no residual life.

47. When Tranche 3 UKPMS systems become available, programmes will be developed on a 'whole life' costing basis rather than the current "worst first" approach, provided that funding levels are sufficient to make such a strategy feasible.

48. In so far as it is possible without a Tranche 3 UKPMS, maintenance interventions are timed to minimise cost over time. Hence the implications of traffic flow and the potential for deterioration to accelerate are considered and areas with minimal residual life but otherwise showing no signs of distress are given a lower priority in an economic best value approach.

49. The proposals for each site have been primarily considered in terms of their priority, based on condition assessment. Sections have then been linked together, wherever appropriate, to create a holistic approach to each route. Treatments within each scheme will vary and the identified treatment will not necessarily apply to the whole length. The proposals have been co-ordinated with other works identified in the Plan to fully tackle the problems and deliver the objectives of the strategy. Schemes are linked to other investment programmes (e.g. structures, transport initiatives) by ensuring appropriate scheme design.

### ***Scheme Design***

50. Effective planning and design is essential to procure the construction of maintenance schemes with the least inconvenience to all road users.

51. Whenever possible the opportunity is taken to co-ordinate works with Utility Company works to reduce the disruption to pedestrians, ensuring that they are completed before the final surfacing.

52. Schemes are subject to impact assessment during the design phase including thorough consultation with stakeholders such as on Disability Groups, Residents Groups, the Police and other Emergency Services and Metro. Before the work starts letters are delivered to all affected properties telling them about the proposals and asking if they have any requirements, proposals to change the use of their properties or need new or changed utility services. The latter was especially important to avoid the road or pavement being dug up after the works are complete.

53. In addition to co-operating works within West Yorkshire, the programme is co-ordinated with the Authorities bordering West Yorkshire.

54. Scheme design and safety audits ensure the incorporation of appropriate features to contribute to integrated transport, environment and local economy objectives, particularly in respect of the following vulnerable road user groups:

- the disabled;
- pedestrians;
- cyclists;
- public transport users.

55. Particular consideration is given to environmental matters:

- re-using materials;
- recycled materials;

- thin surfacings;
- using natural stone materials in Conservation Areas.

### ***Maintenance Requirements***

56. The 2000/2001 settlement has given a positive start to improving the condition of and preserving the investment in the Principal Road Network infrastructure, although the proven maintenance requirement is still considerable. However a bid level has been selected in recognition of the overall funding limitations and the need to adopt a realistic approach with work prioritised over time. The concern remains, though, that if adequate funding does not continue to be made available the network condition will deteriorate.

57. Estimating the financial commitment to tackle the backlog of maintenance and bring the network to an acceptable condition is difficult when the rate of continuing deterioration cannot easily be measured. Estimates have therefore been made assuming minimal deterioration and ignoring the damaging effect of utility openings. This obviously underestimates the need.

58. First, to reduce the proportion of the network with zero residual life to 9% (the upper quartile of National data) over a five-year period, will require strengthening of more than of 35% of the network or 60 km per annum. The estimated annual cost based on £300/ linear metre is in the region of £18m per annum or a total of £90m.

59. Such a programme would need to be implemented while giving continued support to the routine maintenance of the whole network, including maintenance for the safety of road users. This will include considerable maintenance of lengths with one to four years' residual life or with a CVI condition index in excess of 70.

60. Given the results from skid resistance condition assessments and a budget which reflects the needs of the network, an expanded programme to restore skid resistance would be implemented.

61. Currently an estimated 114km of carriageway require surface dressing to restore the skid resistance to at least 0.45. The total cost is in the region of £2.1m.

62. Of greater concern is the length of network which fails to meet the higher investigatory levels (0.55) required for the approach to signals, crossings and the like. An estimated 80 lane km in this category currently fail investigatory levels. Some of these will be addressed through resurfacing and strengthening programmes. Nonetheless a programme of various treatments to restore a high skid resistance to just half of these sites over a period of five years would cost an estimated £1.2m per annum or a total of £6m.

63. Given a settlement for 2000/01 which resulted in the allocation of some £10.5m to highway maintenance, a bid in the region of £14m to £16m per annum is judged to be realistic. While this will not permit the implementation of all the work in the five-year programmes described above, the prioritisation process will enable resources to be used to maximum effect. The greater the shortfall in budget allocation, the further the programme to reduce the maintenance backlog will extend beyond five years.

64. The maintenance work proposed in the five-year programme would make a significant contribution to increasing the strength of the treated sections to bring the network condition up to the current national average. If the settlement is lower than the bid, then it will not be possible to achieve this improvement. Resources would then be

directed to reactive maintenance and resurfacing to address safety issues. The amount of reconstruction would be reduced and would this would consequently limit the possible improvement in the BV PI measurement of residual life.

65. However, if allocated in excess of the bid, the programme would be accelerated to remove the backlog of maintenance in a shorter period of time. This would enable future maintenance to keep pace with deterioration using the best value whole life costing techniques available with tranche 3 UKPMS.

## **IMPLEMENTATION PROGRAMME**

66. The programme for 2000/01 is included in the Annual Progress Report and shows how the settlement is being used to implement the proposals included in the provisional LTP to make most effective use of the resources.

67. The full five-year programme for 2001/06 is included in the Appendix to the LTP. Difficulties nationally in the implementation of UKPMS using live data mean that a totally objective ranking of schemes on condition index has not yet been possible. Furthermore, each of the five West Yorkshire districts are at slightly different stages in the development of PMS and condition assessment databases. None the less, each district has sufficient information to determine priorities within its own area. The single integrated list is a best attempt at merging the five different lists. It is based on the available information which is included against each scheme and the list will be refined in the Annual Progress Report as more information becomes available.

68. Each scheme has been given a cost estimate. Cut-off lines indicate the likely annual progress in programme implementation based on a bid level which Government Office has advised to be realistic.

69. The programme also includes detail of the length of each scheme, the nature of the work, available condition data and linkages with other initiatives. Annual programmes of surface dressing and routine maintenance / minor surfacing ensure that the proposals continue to address maintenance safety issues.

70. The Appendix to the LTP includes additional information on all schemes over £250,000 which it is hoped to start in 2001/02

71. The general strategy is to allocate funds between highway structures and road maintenance in proportion to the bids as these are deemed to represent relative need between the two areas. However, major schemes priorities in either area may require a concentration of funding in a particular year for the affected District. Where this occurs it will be identified in the monitoring report.

72. Where a major scheme impacts on the balance of priorities between bridges and highways, there will be a resulting impact on HM and bridge priorities between Districts. The intention is, therefore, that major bridge and highway schemes should, wherever possible, be managed by adjusting future programmes within the affected District to correct any distortion that such schemes may create.

73. The procurement of the works at each site will be within the Best Value framework developed in each District. Work has been done on challenging the service provision from feasibility study to construction supervision. The most economically advantageous means of procuring the works is used.

74. Consultation and benchmarking within the county and externally is ongoing.

Extensive publicity is given for schemes and Performance Indicators measure the completion of the works.

### ***Monitoring Progress against Plan Objectives***

75. Monitoring information is given in the Annual Progress Report and covers performance indicators and targets in some detail.

76. Progress in applying the strategy is identified by reference to two specific schemes which have been completed in accordance with the principle of the provisional LTP and Best Value, giving full regard to local requirements.

77. It is anticipated that, to comply with Best Value requirements, future monitoring with need to fit into a national framework to enable comparisons between authorities. With UKPMS still at a very early stage of implementation and both NRMCS and the Highway Maintenance Code of Good Practice facing changes there is still much work to do before a full set of meaningful performance indicators is established nationally.

78. Meanwhile the West Yorkshire LTP Highway Maintenance Group is intent upon maintaining awareness of best practice in developing performance indicators. Initiatives include the recent organisation of a Best Value Workshop, chaired by Mike Kendrick. The outcome is a coherent effort to assemble data from the five districts which will:

- measure the impact of work carried out on the structural strength, visual condition and skid resistance of the network;
- measure performance against specific aspects of service provision, including repair of dangerous defects and maintenance of street lights;
- help assess whether the resources invested in both the principal and district road networks are helping to deliver the LTP objectives.

### **HIGHWAY MAINTENANCE REVENUE PROGRAMME**

79. Local Transport Plan settlement moneys cover only the structural maintenance of carriageways on Principal Roads. The effect of ring fencing this finance, and the consequential reduction in Standard Spending Assessment, has increased the pressure on funding of maintenance on the district roads. Without some early recognition of the effects of this funding crisis the long-term financial consequences for the local economy and budgets will be extremely serious.

80. The objectives and strategy for delivery of road maintenance on principal and district roads is covered earlier. The challenges and opportunities apply equally to district roads. However there are additional issues that impact primarily on work carried out from revenue moneys and these are addressed in this section. Transport starts at home. There needs to be a recognition that if buses are to become a transport mode of choice people will want to board them close to home. If they have to get into their cars for the first part of the journey they won't use buses at all. However, the weight of buses on local roads, not designed for the purpose, causes a disproportionate degree of damage.

### ***Meeting Plan Objectives***

81. Highway maintenance has a significant contribution to make towards the implementation and subsequent maintenance of features introduced to the highway in

support of the plan strategies. However the cost of maintaining this greater part of the network is funded from revenue including:

- the proper maintenance of pavements and road edges as an essential element of the strategy to encourage more walking and cycling;
- addressing the structural damage caused by local bus services on local roads, particularly on housing estates;
- maintaining the environment with the increasing pressure to include high specification materials and casualty/speed reduction features;
- regular and expensive renewal of carriageway markings and coloured and anti-skid surfacings;
- the regular replacement and repair of features such as refuges, kerb build outs and bollards which are often located in particularly vulnerable locations;
- addressing repairs on streets with road humps and cushions - features which increase the requirement for carriageway resurfacing by concentrating damage in very concentrated narrow wheel tracks and then require more expensive repairs due to the need to hand lay around them, often with extensive traffic control arrangements or even road closures.

82. The role of these features in casualty reduction and encouraging the use of other modes of transport and in improving the environment is vital. However, the resulting pressure on revenue maintenance does need to be recognised in the SSA calculation.

### **General Analysis**

#### Structural Maintenance of Pavements, Roads and Drainage

83. The increase in the highway network length resulting from new developments and highway improvement schemes has most impact on the District's road length. While network length is reflected in SSA calculations, this is of little consequence when a control total is applied and the increase is not reflected in budget growth.

84. Furthermore, the SSA calculation fails to properly account for the increase in maintenance intensive features and high cost materials. This results in an overall reduction in the area of maintenance work which can be completed for the same money and reduces the effectiveness of other initiatives.

85. Revenue budgets also need to address the increase in level of damage the District road network suffers both from a lack of strength and a lack of carriageway width, particularly on the older parts of the network and where there is no off-street provision for parking. This is resulting in considerable damage as vehicles over-ride the pavements, breaking flags and damaging verges.

86. The National Road Maintenance Condition Survey has indicated that the gap between maintenance requirements and available funding on the non-principal road network has again widened with many roads in critical need of major maintenance work.

87. The ageing highway drainage systems have been neglected for many years because of insufficient funding and it is anticipated that a substantial increase in reactive maintenance will be required during the next few years.

### Fences, Walls, Bridges, Culverts and Subways

88. Walls less than 1.5m high supporting the road or adjacent land are 'small walls' and together with culverts less than 1m across are funded from Revenue. Due to the lack of funding over the years they are now deteriorating to such an extent that work can only be carried out when they collapse and even then it often has to be delayed for long periods, creating an unkempt appearance.

89. The programme of strengthening and structural maintenance of highway structures is accompanied by a substantial amount of other work; mainly routine maintenance to fences, walls, bridges, culverts and subways. This work is covered in more detail in the bridges and structures text.

### Horticultural Maintenance

90. Priorities for grass cutting may have to be changed if further reductions are made to budgets. In some areas verge maintenance work has already been reduced to only cutting 1 metre wide at the edge of the road and visibility splays at junctions.

91. The highway tree stock requires a continuous programme of felling and replenishment to maintain a safe healthy and attractive stock.

### Winter Maintenance

92. Winter Maintenance operations are expensive and budget limitations only permit a basic service for an average winter. The network is prioritised for treatment. Main Bus routes and main roads receive precautionary salting, as well as first action during snow, to help maximise safety and keep the network functioning to ensure the continuation of economic activity during periods of inclement weather.

93. The authorities have the responsibility for the maintenance of highway ranging from altitudes of near sea level to 526m (Holme Moss) above sea level. A substantial length of highway is above 183m (600ft) with a significant number of residential areas above the 300m (1,000ft) contour. A major effect is the frequency with which precautionary salting has to be carried out. Often both morning and evening grits are required to counter frost and ice in addition to gritting and ploughing to remove snow.

94. Salt kept dry in a salt barn is not only much more effective at treating ice on roads but is also more efficient. It is anticipated that the savings from using dry salt would achieve a pay back period for the cost of a barn within 5 years. Some Districts are considering the provision of salt barns, particularly where there are added environmental problems resulting from the location of sites and control of run off.

### Traffic Signal Maintenance (Urban Traffic Control)

95. Costs include the maintenance of traffic signals and pelican installations, provision of computer and data transmission facilities and telephone line rentals.

96. The objective of the methods and technology used is to minimise the downtime of all UTC equipment. In particular, the application of remote monitoring techniques at installations ensures that faults are detected early and the required course of action is identified to effect a repair.

### Carriageway Markings, Traffic Signs and Features

97. The increasing use of signs and markings as control features is placing an increasing pressure on budgets. Carriageway markings are being eroded more rapidly



as a result of increased traffic flows and heavier axle weights of HGVs.

98. The normal replacement of signs and barriers reaching the end of their effective life is exacerbated by the need to meet statutory obligations on damaged or vandalised bollards and signs.

#### Footpaths and Bridleways

99. West Yorkshire has a substantial length of footpaths, bridleways and byways and with increased leisure time for residents and increased numbers of tourists to the area, greater recreational use is being made of these highways.

100. Strong representations have been made by horse riders and walkers for substantial improvements to be made to bridleways and footpaths. Weather conditions combined with the local topography and unsuitable usage such as “off-roading” and mountain biking on footpaths lead to a significant annual maintenance requirement.

101. Targets set by the Countryside Commission’s Milestones Approach have been adopted and commitment is demonstrated with additional staff and resources. However, large numbers of footpaths and bridleways are currently impassable and substantial additional funds are required if the objectives are to be met.

#### Highways Act and NRSWA Functions

102. Ensuring that roads and pavements are not unduly obstructed by skips, scaffolding, overgrown vegetation and that undertakers carry out street works in accordance with legislation, is costly in staff time. This is becoming increasingly more onerous with the high number of developers and telecommunications companies moving into the region.

103. There is an ever increasing expectation by the public that the Highway Authority will take a proactive role in managing the work of the Utilities. This is compounded by the Utilities reducing their costs by outsourcing more and more of their work and some apparent unwillingness to programme mains renewals in advance of maintenance works.

#### Reducing Third Party Claims

104. The public is increasingly aware of their recourse to litigation whenever an accident occurs on highway land. The Authorities want the introduction of the Woolf protocol in the handling of claims to become a positive tool which will assist them in dealing quickly with valid claims, while using good information from their management systems, to repudiate those claims where the authority has acted in a fully responsible manner.

### **STREET LIGHTING**

105. The provision of effective street lighting is essential to implementation of the Highway Maintenance Strategy within the Local Transport Plan and is therefore given specific reference in this document.

#### ***Objectives***

106. The following objectives have been agreed for the maintenance and enhancement of our street lighting installations:

**To maintain the lighting installation:**

- to maximise the number of lighting units which are working as planned;
- to ensure the structural stability of existing units;
- to achieve a level of lighting consistent with current standards;
- to ensure the electrical integrity and safety of existing units.

**To contribute to a safe and secure night time environment:**

- as a crime prevention measure, and in particular to reduce the risk and the perception of risk of personal assault and harassment;
- to reduce the risk of collision between road users (to see and be seen);
- to reduce the risk of collision or accidents from road users' inability to clearly see potential hazards on the highway (e.g. footway trips, potholes, etc.);
- to manage the use of energy;
- to ensure that all new highway schemes have street lighting that meets the relevant standards.

***Strategy***

107. All the authorities carry out a programme to change lamps on a two or three year cycle, on an area basis, for units where the occurrence of random failure is likely to increase beyond this period. The transparent outer cover and the optical reflective surface are cleaned at the same time to maximise the effectiveness of the light output. In some Districts, lamps with a longer burning life are permitted to 'burn to extinction' or have a longer block change cycle of up to 6 years. The block change strategy is supported by systems for the identification and repair of random failures.

108. Non-settlement moneys also fund:

- maintenance and replacement of obsolete / end of life equipment;
- ad hoc replacement, on an individual basis, of vandalised and impact damaged;
- minor community safety / enhanced lighting schemes and road safety schemes;
- energy costs and repair to street lighting energy supply equipment.

109. Maintenance strategies are evolving using the benefits of new technology. Systems are being developed to manage the asset and to deliver improved service delivery. The introduction of remote detection of faults using a mains borne signalling device from a monitoring unit fitted to each lighting unit, electronic transmission of works instructions and the benefits of Geographic Information Systems (GIS) linked to inventory databases are leading the way to a better service. New types of lamps and energy efficient control gear are currently being evaluated. They are more expensive, but could be suitable for use on new installations.

***Consultation and Monitoring***

110. Recent surveys have indicated that people consider that the standard of street lighting should have a very high priority. Two specific issues identified were:

- the need to promptly repair lamps that had failed;

- the need to improve the standard of lighting of poorly lit roads.

111. The first issue is currently addressed in a systematic manner and is the subject of performance indicators published by the Audit Commission. The latter issue should be resolved by bringing the standard of lighting up to current British Standard recommendations during a structural replacement programme.

112. There is a debate about the relative merits of white (SON) and yellow (SOX) lighting units. The use of yellow units is perceived to be the economical solution and most sustainable in terms of energy consumption. However, white units give better colour rendition and are more popular to the extent that white lighting may encourage people to go out at night in situations where they, otherwise, feel personally vulnerable. This issue is still being considered and will be one of the topics where feedback from consultation will be particularly useful.

### ***Meeting Plan Objectives***

113. Street lighting improvements form an integral part of the delivery of the Plan objectives as part of:

- safe routes to schools;
- road safety, casualty reduction schemes;
- community safety / enhanced lighting schemes;
- highway improvement and capital maintenance schemes;
- transport initiatives to encourage modal change.

114. Revenue funding is enhanced by private sector funding for lighting on new housing and commercial estate roads and on highway improvements associated with those developments. Consideration is being given to incorporating commuted sums for maintenance/energy costs in these cases.

115. The public concern about the need for good lighting is potentially a major factor in choice of travel mode when making journeys in the hours of darkness. Personal safety considerations greatly affect the decisions people make.

116. Good street lighting will increase the effectiveness of casualty/speed reduction measures and in some cases will form an integral part of the scheme, for example in ensuring road width restrictions are visible at night.

117. City and town centres are becoming more reliant on the use of closed circuit television (CCTV) cameras as a tool to fight crime and to visually monitor activities in public areas. It is essential that sites where these cameras are used be particularly well lit with white lights to make it easier for operators to see people, vehicles etc.

118. Adequate street lighting is an essential part of safety and transport schemes and resources need to be made available to support lighting replacement and improvement schemes to ensure that the objectives are met.

### ***Implications***

119. In delivering the objectives and fulfilling the strategy, street lighting faces some specific challenges.

120. There are approximately 254,000 street lights in West Yorkshire, with this total

increasing year on year. During the 1950s and 1960s there was a large increase in the column population. These columns are all now reaching the end of their safe working life. About 20% of the current street lighting needs to be replaced due to age and deteriorating condition (approximately 56,000 columns). Each year an additional 6,000 columns are reaching a similar condition.

121. Renewal of the existing stock is also required to achieve current lighting standards. This would increase the number of lighting units by up to 50%. Improving standards of lighting will result in higher energy consumption.

122. Opportunities to pay a premium for 'green' electricity, which has not been generated from fossil fuel sources of energy, are consistent with environmental policies. The issue of sustainability versus economy will therefore be a topic for feedback and debate.

123. The cost of energy is further affected by proposals to introduce a new tax on the business use of energy. Designed to curb greenhouse gas emissions, this is estimated to increase local authority energy bills by 10 to 15% and will have major implications for street lighting revenue budgets.

124. Even without a major replacement programme, the number of streetlights on the highway network is increasing by between 1 and 2% per annum. As a result the routine maintenance liabilities are increasing which diverts resources from renewal programmes.

125. There is a serious safety risk if a column in critical condition collapses. Many columns are now reaching the end of their safe working life, despite maintenance strategies such as steel oversleeving of concrete columns. There is a current liability of about £56 million with a continuing liability of £6 million per annum to ensure the existing situation does not deteriorate.

126. However, the level of funding for maintenance replacements and renewals is not enough to even keep pace with the current rate of deterioration of the lighting stock or to meet the identified need to maintain and improve the network and satisfy public aspirations. The level of maintenance replacements and renewals that occur as a result of other schemes assists, but is not enough to prevent further deterioration of the lighting stock. The level of revenue funding available for street lighting is completely inadequate to make any significant impact on the backlog of replacements.

127. Unless there is a significant investment in street light renewals very soon, serious consideration will have to be given to a policy of removing old and dangerous columns and not replacing them. Currently in some areas there is a review of whether there is a need to replace street lighting to the same standard after columns are removed for structural safety reasons. There is also the possibility of targeting areas where repairs will not be carried out if units fail.

128. Hence alternative sources of funding are being investigated. In particular, advertising and private finance initiatives are being considered as areas with some potential. However, these can only take effect in the longer term. There is an immediate need for an increase in street lighting funding to enable the most urgent problems to be tackled. Recent events elsewhere, including a fatality and serious personal injury have shown the potential consequences that may result from inadequate maintenance of the street lighting infrastructure.

129. This is not a bidding issue according to LTP guidance, however, revenue funding cannot support the sums involved. Neither PFI, nor revenue streams generated by advertising on lamp columns, are yielding sufficient revenue. To address this national problem the Street Lighting Parliamentary Working Group recently indicated the need for street lighting replacements to be funded from capital. For this reason a bid has been included for lighting column replacement.

130. If it is assumed that further deterioration to the lighting stock can be prevented using existing sources of finance, then a ten year programme at £6million per annum would address the existing backlog. The works would be prioritised using the results from ongoing visual inspections and ultra sonic testing.

## **BRIDGES AND STRUCTURES STRATEGY**

### **INTRODUCTION**

1. Bridges are one of the key elements of the highway network. The majority of bridges were built prior to 1953 and were not designed to current loading standards. Many years of natural deterioration, frequently requires that temporary weight restrictions are imposed where current standards are not met. This usually needs to be followed by strengthening or reconstruction.
2. The hilly topography of West Yorkshire requires regular application of road de-icing salts to permit traffic to flow unhindered by frost, ice and snow. De-icing causes structural deterioration from the penetration of salt into steel and reinforced concrete structures. Bridges built after 1965, often of steel or concrete, have been subject to 'wear and tear' from the effects of traffic and road de-icing salts, exacerbated by failing movement joints. Without adequate waterproofing systems, masonry arch bridges suffer from material breakdown arising from sulphate attack from de-icing salts. Measures are often required to prevent further deterioration and to maintain carrying capacity.
3. Because of the topography of West Yorkshire, burr walls and retaining walls form a major part of the highway structures stock. There are several hundred kilometres of structural highway walling (greater than 1.2 m high). A high proportion of walls are of dry stone construction, over 100 years old and are reaching the end of their useful life. The use of large HGVs is imposing increased loading on many walls at a time when their condition has deteriorated due to weathering, pollution and other factors.
4. The maintenance and strengthening of bridges at critical locations is a prerequisite to the continued effective implementation of the Local Transport Plan. The highway structures stock is summarised in Table 1.

	Bridges	Culverts	Foot-bridges and Subways	Structural Retaining Walls (Estimate)	Sign Gant-ries	High Mast Lighting Columns	Signal Mast Arms	Total No. of Structures
Bradford	179	171	148	100 km	12	N/A	10	520
Calderdale	179	104	141	275 km	4	0	0	428
Kirklees	209	209	247	400 km	4	0	0	669
Leeds	208	135	179	120 km	44	118	30	714
Wakefield	64	86	50	20 km	8	18	1	227
Total	839	741	765	915 km	72	136	41	2,558

*Table 1: Local Authority Highway Structures Stock in West Yorkshire*

5. In addition to having responsibility for the assessment, strengthening and maintenance of their own bridge stock, the districts are also carrying out bridge assessments on bridges owned by other authorities as shown in Table 2.

	Railtrack	BRPB	British Waterways	Other Private Owners	Total
Bradford	28	14	8	40	90
Calderdale	25	6	2	16	49
Kirklees	25	23	11	12	71
Leeds	41	14	3	76	134
Wakefield	41	7	3	3	54
Total	160	64	27	147	398

*Table 2: Non-District Bridges*

6. The five districts have adopted a joint strategy for their programmes of Bridge Assessment, Strengthening and Maintenance. However because of varying topography, each district places emphasis on different aspects of the strategy.

7. The assessment programme is almost complete with exceptions relating primarily to bridges on non-PRN routes and bridges owned by Railtrack and other Private Owners principally Yorkshire Water. Further details are shown in the Assessment Section.

8. We have been able to address the key needs with regard to bridge strengthening by targeting available resources at those bridges with the greatest need. The remaining resources have been used in providing interim measures such as weight restrictions on weak bridges or further assessment work to improve the capacity of bridges that failed the initial assessment.

## **OBJECTIVES**

9. Our aim is to provide a bridge and highway structure stock of suitable standard to allow the safe and efficient movement of people and goods with minimum adverse effect on the environment. In line with achieving our primary objective of maintaining a safe and efficient transport infrastructure for all users, the specific objectives for bridges and highway structures maintenance and strengthening are:

- all highway structures must be able to safely carry appropriate traffic including pedestrians and cyclists and where required, abnormal loads;
- all highway structures must be visually acceptable to the community;
- user disruption should be kept to the minimum;
- preventative maintenance should be carried out adequately and rigorously so that backlogs of sub-standard bridges and structures will not build up;
- materials used should be chosen so that they minimise the depletion of natural resources, maximise the use of waste materials, and minimise the emission of harmful gases and their by-products to the environment;
- structures and their components should be designed in such a way that they may be easily maintained and provide flexibility for future generations to modify them for modes of use that cannot yet be envisaged;

- to plan and manage available resources to ensure their economic, efficient, and effective use.

## **STRATEGY**

10. The achievement of the objectives will be progressed through:

- completion of the Bridge Assessment Programme;
- assessment of the risks associated with undertaking monitoring of a structure prior to the introduction of other interim measures;
- provision, where possible, of interim measures to permit the passage of 40 tonne vehicles across Principal road bridges;
- assessment of the risks associated with diverting traffic elsewhere when weight restrictions are under consideration;
- prioritising the strengthening of highway structures with emphasis on Primary Route Network bridges which carry the heaviest flows of HGV traffic;
- liaison with other disciplines to ensure co-ordinated approach to route management;
- giving appropriate consideration in prioritisation of strengthening to important public transport routes which if closed or restricted would cause serious disruption to passengers and operators;
- ensuring that bridges on other routes that provide essential access routes to industrial and commercial premises, which without HGV access could not function, are given appropriate priority;
- liaison and co-ordination of strengthening programmes locally and regionally with other bridge owners to ensure a consistent approach to the assessment and strengthening of Primary Route Network and key secondary route bridges.

### ***Assessments and Strengthening***

#### Liaison with Other Authorities

11. Liaison and the co-ordination of strengthening programmes locally and regionally with other bridge owners have been and will be maintained within West Yorkshire and the surrounding highway authorities. This ensures a consistent approach to the assessment and strengthening of Primary Route Network and key secondary route bridges.

12. Liaison has also been ongoing with the Highways Agency with regard to assessment and strengthening of bridges on trunk roads and bridges over the motorway network, and with Yorkshire Water, a major owner of private bridges. In addition liaison continues countywide with Railtrack, British Rail Property Board and British Waterways.

#### General Consultations

13. The Local Transport Plan has been produced with the collaboration of representatives from all the Districts through a Core Group. The work of the Core Group included extensive consultation and participation exercises, on all aspects of the Plan, with individuals and representative groups across West Yorkshire.



14. Consultations with organisations representing the transport industry and the West Yorkshire Passenger Transport Executive, on behalf of bus companies, have formed a fundamental part of the development of the bridge strengthening strategy within Leeds. As part of the 'Leeds Bridge Strengthening Strategy and Programme Study' the following bodies were contacted by letter, informing them of the study and its objectives. Their comments were discussed and taken on-board:

- Freight Transport Association
- Road Haulage Association
- Heavy Transport Association
- National Grid (through their transport consultants)
- West Yorkshire Passenger Transport Executive

15. In all Districts the programmes of Capital Works for Carriageway and Highway Structure schemes are only implemented following receipt of approval from elected members through appropriate committees or boards.

#### Specific Consultations (prior to project implementation)

16. Consultation with local residents and businesses anticipated to be affected by the work takes the form of a circular letter, delivered to businesses potentially affected by the works. The consultation contains brief details of the scheme and how the work is expected to affect local activities. Where appropriate, advice as to how to mitigate adverse effects is offered and in every case, a contact for discussion of anticipated problems is offered. Consultation takes the form of a similar circular letter to the above, delivered to affected residences. The letter gives details of the extent, scope and timing of the work and invites contact with officers involved to discuss details, concerns or misgivings. Feedback from residents and community groups is taken into account through Neighbourhood Forums and local Ward Members.

17. Consultation in respect of all bridgework which has the potential for interruption of normal traffic flows is always undertaken and takes the form of a meeting with the emergency services, traffic managers, New Roads and Street Works Act officers and West Yorkshire Passenger Transport Executive (Metro).

18. Where projects affect routes with cross-boundary implications, liaison with neighbouring authorities' traffic managers is undertaken and measures (i.e. advance and advisory route signing) are implemented collaboratively.

#### Prioritisation

19. We have developed a criteria based approach to selecting priorities for the bridge assessment and strengthening programme. Essentially they give priority to bridges on the Primary Route Network with emphasis on those routes which carry the heaviest flows of HGV traffic.

20. The strategy also recognises that there are bridges on other roads that form essential access routes to industrial and commercial premises that could not function without direct HGV access. Similarly, there are also bridges on important public transport routes that, if closed, would cause serious disruption to passengers and operators. This would undermine the role of public transport that the Local Transport Plan is seeking to develop.

21. We are also seeking to provide interim measures, where appropriate, to permit the passage of the 40 tonne EU vehicles across all Principal Road bridges where it has not been possible to strengthen because of limited funding.

22. A strategy has been developed which seeks to address the issues in a logical and pragmatic manner. This strategy ensures that those bridges that are essential to the economic well being and movement of goods and people by public transport around the district and region are given the appropriate priority.

23. The bridges strengthening criteria are shown in Table 3. Priority for strengthening is a function of the primary selection criteria, supported by the broad bands of HGV traffic flow given in the secondary criteria. The criteria are applied with flexibility because every bridge is unique, with factors specific to its location. The application of these criteria is subject to the provisions of BA79/98. In Leeds, these criteria have been endorsed by the recommendations of an independent consultant's report.

<b>Primary Selection Criteria</b>					
Priority Rating	Priority Criteria				
1	Primary Route Network				
	Any route used by HGVs and PCVs where no alternative route exists				
2	All other A roads - except where for environmental reasons an HGV restriction has or is to be introduced where adequate alternative routes exist				
	Cross boundary routes other than the PRN used by significant HGV traffic where agreement is reached with the neighbouring authorities on the need to give works priority for strategic reasons				
3	B roads and other roads which give access to significant generators of HGV traffic				
	Other roads where the diversion to alternative routes would cause a net environmental disbenefit to local communities or a weight restriction would have severe effects on local industry and commerce				
4	Other routes used daily by HGVs where it is desirable that the bridge be strengthened rather than a restriction imposed and the traffic diverted to another route less suitable for such traffic				
<b>Secondary Selection Criteria</b>					
Criticality rating	A	B	C	D	E
Daily HGV flow	>3,000	1,500 – 2,999	750 – 1,499	250 - 749	<250

*Table 3: Selection Criteria for Priority of Assessment and Bridge Strengthening*

24. All the districts recognise that it may not be economically viable, environmentally acceptable or necessary for all weak bridges to be capable of carrying 40 tonne vehicles. However, the question of the adequate policing of weight-restricted bridges is a prime concern and in some cases physical measures such as width restrictions are adopted to prevent unauthorised use. The needs of public transport, emergency services and winter maintenance have also to be taken into account. Additionally, the routing requirements for abnormal load movements within West Yorkshire are taken into account when determining which weak bridges should be strengthened and to what level i.e. in excess of 40 tonnes, HA or 30 units HB.

25. The strategic nature or access role of the route carried by a particular bridge and the urgency of strengthening works as shown by the result of the assessment is taken into account where appropriate. The importance of feeder routes to the Primary Route Network, particularly in the steep sided valleys of the Pennines where suitable diversion routes are unavailable, is also an important factor.

26. The question of whether maintenance expenditure is required is relevant in establishing strengthening priorities in all districts. Some maintenance expenditure is necessary to maintain the assessed loading capacity in specific bridges and to prevent further deterioration.

27. An assessment of the risks associated with postponing the introduction of formal interim measures (e.g. the introduction of weight restriction) whilst setting up a monitoring regime are also taken into account, as are the risks associated with diverting traffic elsewhere when weight restrictions are under consideration.

28. Access to major industrial sites including the effect of low headroom bridges on potential diversion routes is a prime concern in all districts.

29. The strengthening strategy for Railtrack bridges whose assessments are incomplete is dependent on the outcome of those assessments and their relationship to Railtrack's load bearing obligations.

30. The poor condition of retaining walls supporting the highway is of concern across the county and is of particular importance within the Pennine areas of Bradford, Calderdale and Kirklees. Here the nature of the road network constructed along steep-sided valleys along sidelong ground has created a need for large retaining walls, many of which are reaching the end of their lives. Bradford has an ongoing programme of assessment of walls supporting principal roads whilst other Districts are setting up similar programmes. Three points are worthy of note:

- because of the inherent difficulties of assessing the strength of walls, their maintenance need is unpredictable, usually following a collapse. This can occur on any class of road and be as disruptive as a bridge closure;
- it is impossible to impose meaningful and effective weight restrictions along lengths of highway supported by walls;
- diversion routes are extremely problematic often forcing traffic onto even less suitable routes.

### Programme

31. All the districts had been working to meet the national target of assessing all the districts' bridge stock on Principal Roads by 31 December 1998. However, delays have

been experienced due in part to the late start of the Railtrack part of the programme and to the poor condition of many of the Railtrack-owned bridges, and also to the lack of agreement with BRPB regarding the assessment of Property Board bridges.

32. Additional slippage in the programme for district-owned bridges has been caused by implementing revised standards that have become available during the course of the programme. These have enabled further assessment work or testing to fully establish the hidden strength of the bridges, whilst managing their weaknesses in accordance with BA79 'The Management of Sub-standard Bridges'.

33. The identification of additional structures in the Other Private Owners category has required an extension of the programme.

### ***Structural Maintenance***

34. Structural maintenance schemes are often combined with strengthening schemes, to preserve the condition of the bridge such that further deterioration is avoided and the load carrying capacity of the bridge is maintained, thus minimising disruption to the network.

35. We have identified programmes of structural maintenance, which have been interrupted by the bridge strengthening programme. These programmes rely on information drawn from Principal Inspections carried out as part of the bridge assessment process. It is proposed to include further Principal Inspections during the course of the Plan period on those structures that have been excluded from the assessment programme or are due to be repeated.

36. Programmes of structural rehabilitation and upgrading have been developed following the example of the Highways Agency's 15-year Rehabilitation Programme. These programmes address issues such as the replacement of waterproofing membranes before failure, the upgrading of sub-standard parapets and the replacement of life-expired bearings and joints.

37. The hilly topography of West Yorkshire coupled with the density of traffic requires regular application of road de-icing salts to permit traffic to flow unhindered by frost, ice and snow. All the districts have identified the need to overcome the effects of structural deterioration due to the penetration of de-icing salts into steel and reinforced concrete structures. It is also apparent that, without adequate waterproofing systems, masonry arch bridges suffer from material breakdown arising from sulphate attack from de-icing salts. Measures are often required to masonry arches to prevent further deterioration and to maintain the assessed capacity.

38. It is anticipated that after the bridge strengthening programme is completed, the substantial backlog of work in the areas described above will be addressed. This process will begin during this 5-year programme, as the majority of the funding required is diverted from strengthening to structural maintenance. However it is expected that in future years there will be even greater demands on funds for structural maintenance.

## **ASSESSMENT OF STRUCTURES**

### ***Bridges***

39. Bridge assessment programmes have been prepared using the priority criteria described above. Progress to 31 March 2000 is summarised in Table 4.

	Bridges in Programme	Bridges Assessed		Strength-ened	Bridges to be Strengthened			Outstanding Assessments
		40 tonne Capacity	< 40 tonne Capacity		Primary Route	Principal Roads	Other Routes	
<b>BRADFORD</b>								
Council > 1.8m	200	117	63	24	2	3	32	20
Council 1.5 to 1.8m	49	0	0	0	0	0	0	49
Railtrack	28	14	8	2	1	0	5	6
BRPB	14	0	0	0	0	0	0	14
BWB	8	4	4	1	0	0	3	0
Other Private	40	3	8	0	0	0	8	29
<b>Totals</b>	<b>339</b>	<b>138</b>	<b>83</b>	<b>27</b>	<b>3</b>	<b>3</b>	<b>48</b>	<b>118</b>
<b>CALDERDALE</b>								
Council > 1.8m	183	113	66	38	0	3	25	4
Council 1.5 to 1.8m	5	0	0	0	0	0	0	5
Railtrack	25	1	4	1	0	0	3	20
BRPB	6	0	0	0	0	0	0	6
BWB	2	1	1	0	0	0	1	0
Other Private	17	9	8	1	0	0	7	0
<b>Totals</b>	<b>238</b>	<b>124</b>	<b>79</b>	<b>40</b>	<b>0</b>	<b>3</b>	<b>36</b>	<b>35</b>
<b>KIRKLEES</b>								
Council > 1.8m	244	152	79	60	0	4	15	13
Council 1.5 to 1.8m	44	0	0	0	0	0	0	44
Railtrack	25	13	4	0	0	0	4	8
BRPB	23	9	3	0	0	0	3	11
BWB	11	10	1	0	0	0	1	0
Other Private	12	5	1	0	0	0	1	6
<b>Totals</b>	<b>359</b>	<b>189</b>	<b>88</b>	<b>60</b>	<b>0</b>	<b>4</b>	<b>24</b>	<b>82</b>
<b>LEEDS</b>								
Council > 1.8m	206	98	53	13	14	4	22	55
Council 1.5 to 1.8m	36	0	0	0	0	0	0	36
Railtrack	41	3	6	0	2	2	2	32
BRPB	14	3	5	3	1	0	1	6
BWB	3	2	0	0	0	0	0	1
Other Private	76	4	4	0	2	0	2	68
<b>Totals</b>	<b>376</b>	<b>110</b>	<b>68</b>	<b>16</b>	<b>19</b>	<b>6</b>	<b>27</b>	<b>198</b>

<b>WAKEFIELD</b>									
Council > 1.8m	72	50	21	11	1	2	6	1	
Council 1.5 to 1.8m	10	0	0	0	0	0	0	10	
Railtrack	41	24	15	2	1	0	10	2	
BRPB	7	4	3	0	0	1	2	0	
BWB	3	0	3	0	0	0	1	0	
Other Private	3	0	0	0	0	0	0	3	
<b>Totals</b>	126	78	42	13	2	3	19	6	
<b>GRAND TOTAL</b>	1,438	639	360	156	24	19	154	439	

*Table 4: Bridge Assessment Programme - Position at 31 March 2000*

40. All bridge assessments in the five Districts are programmed for completion by March 2001 except for the following:

- BRPB bridges in Bradford and Calderdale,
- Railtrack bridges in Calderdale and Leeds,
- Other Private Structures in Leeds,
- Council owned bridges between 1.5m and 1.8m span.

#### Council Owned Bridges

41. All council owned bridges across West Yorkshire of span greater than 1.8m carrying the PRN and principal roads had been assessed by the end of March 1999. Assessments of council owned bridges on other routes were substantially completed in Calderdale, Kirklees and Wakefield during 1999/2000 and will be completed in all Districts during 2000/2001. Bridges with spans between 1.5m and 1.8m will be programmed for assessment in 2001/2.

#### Railtrack Bridges

42. Bradford, Kirklees, Leeds and Wakefield have entered Joint Venture agreements with Railtrack for the assessment of Railtrack owned bridges carrying public roads. Bradford, Kirklees and Wakefield expect to complete their programmes in 2000/2001. Leeds' programme extends to 2001/2002.

43. The assessments of Railtrack owned bridges in Calderdale are being carried out by the bridge owner and are ongoing. Information on the timescale for completion is awaited from Railtrack.

#### British Rail Property Board Bridges

44. Kirklees and Wakefield have signed agreements with BRPB to carry out assessments of their bridges which carry public roads. Wakefield has completed the assessments and Kirklees will complete its programme in 2000/2001. Leeds has assessed BRPB bridges on high priority routes prior to entering a formal agreement and proposes to sign an agreement with BRPB in the near future that will allow the assessments to be completed in 2000/2001. Bradford and Calderdale have yet to conclude an agreement with BRPB and do not expect to complete the assessment of these bridges before the end of 2001/2002.

### British Waterways Board Bridges

45. British Waterways has completed assessments of all its bridges in West Yorkshire carrying public roads except for one bridge in Leeds for which the assessment result is under discussion.

### Other Private Structures

46. Lists of privately owned structures of span greater than 1.8m and programmes for their assessment have been prepared. This has involved liaison with British Coal, Environment Agency, Rochdale Canal Company, Yorkshire Water and other private owners. Further liaison will be required following recent guidance on the span limit applied to council owned structures.

47. Progress on the programme varies across the county:

- Calderdale has completed its programme;
- Kirklees and Bradford carried out some assessments during 1999/2000 giving priority to bridges carrying principal roads and will complete the programmes in 2000/2001;
- the private structures in Wakefield are all on minor roads and will be assessed during 2000/2001;
- Leeds has identified a large number of private structures. Many are owned by Yorkshire Water and are confined spaces that have incurred high inspection costs. A start has been made on assessing these structures giving priority to principal roads, but the assessment of structures on non-principal routes will extend into 2002/2003.

### ***Retaining Walls***

48. In West Yorkshire there are numerous burr and retaining walls built for highway purposes which come within the scope for assessment. These walls require identification prior to the preparation of assessment programmes. This exercise has begun in some Districts and will begin in other Districts during 2000/2001.

### ***Assessment Costs***

49. The current bridge assessment programme will be substantially complete by the end of 2000/2001 except as described above. The assessment bids reflect this and also take account of the following:

- the recent reduction in the span limit for assessment from 1.8m to 1.5m;
- the bids include the ongoing costs of identifying and assessing highway retaining walls in all the Districts;
- the four Districts that have Joint Venture Agreements with Railtrack have paid Railtrack's costs to date but work is ongoing. The bids cover anticipated outstanding payments which will have to be made under the Agreements but final accounts have still to be agreed;
- Calderdale has paid Railtrack in advance to assess their bridges and do not anticipate any further payment;
- in Leeds, the completion of the assessment programme has been delayed because of the large number of private structures, the issue of revised assessment standards

during 1996/1997, the general poor condition of Railtrack bridges where extensive examination and subsequent appraisal has been found to require additional resources;

- the result of a bridge assessment is valid only so long as the condition of the structure remains unchanged. There is a need, which has been recognised by the Highways Agency, to have an ongoing programme of assessments following the current programme. This will cover those bridges not included in the current programme and reviews of previous assessments where changes in condition or use of the structure are identified.

50. Within our objective to keep road user disruption to a minimum the aim has been to limit the number of lane and weight restrictions on bridges by using all the available assessment techniques to the full. This has required more time, resources and funding than originally envisaged.

### ***Effect of Sub- Standard Bridges and Structures***

51. The sub-standard bridges and structures on principal roads which have been identified through the assessment programmes of the five Districts up to the 31 March 2000 are listed in Table 5. The effects on the principal road network and on other routes are currently being minimised by management of the sub-standard bridges through the application of the principles contained in Departmental Advice Note BA79.

<b>District</b>	<b>Structure Name</b>	<b>Owner</b>	<b>Route</b>	<b>Substandard Elements</b>	<b>Assessed Capacity (tonnes)</b>	<b>Interim Measures</b>
Bradford	Ivestone	Bradford	A629	Spandrel Walls Abutments	12.5	Monitoring
Bradford	Weston Hill	Bradford	A6038	Masonry Arch	10	Monitoring
Bradford	Valley Road Br	Bradford	A6037	Piers	7.5	Weight Restriction
Bradford	Queens Rd (B171)	Bradford	A6177	Masonry Arch	17.5	Monitoring
Bradford	Canal Rd (B165)	Bradford	A6037	Masonry Arch	25	Monitoring
Bradford	Retaining Walls	Bradford	A644	138 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A629	741 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A65	373 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A6038	550 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A657	45 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A641	95 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A644	197 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A647	504 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A6033	262 lin. m of wall	Various	Monitoring
Bradford	Retaining Walls	Bradford	A6034	653 lin. m of wall	Various	Monitoring
Calderdale	County	Calderdale	A58	Wrought iron widening under footpath	7.5	Footway protection proposed
Calderdale	Golden Lion	Calderdale	A6033	Cast iron widening under footpath		Footway protection



District	Structure Name	Owner	Route	Substandard Elements	Assessed Capacity (tonnes)	Interim Measures
Calderdale	Brighouse Canal	Calderdale	A641	Concrete widening under footpath		Handrail between carriageway and footway
Kirklees	Victoria Bridge, Holmfirth	Kirklees	A635	Concrete extension – beams and columns	3	Traffic measures - kerbs
Kirklees	Leeds Road Railway	Kirklees	A62	Steel beams encased in concrete under kerbs	25	Monitoring
Kirklees	Woodsome Mills	Kirklees	A62	Footway extension – steel beams encased in concrete and slab over	3	Monitoring
Kirklees	Cook Lane	British Rail Property	A651	Wrought iron beams	0	Monitoring
Leeds	Wharfe	Leeds	A58	Reinforced concrete anchor arms and cantilevers	17	Monitoring
Leeds	Pool	Leeds	A658	Muti-span arches. Downstream arch capacity	7.5	Monitoring
Leeds	Croft	Leeds	A642	RC box	17	Monitoring Weight Restriction.
Leeds	Swillington	Leeds Council	A642	Spandrel walls	7.5	Monitoring
Leeds	Bangor Terrace	Leeds	A6110	Weak footways	7.5	Footway Protection
Leeds	Gelderd Road	Leeds	A62	Weak webs to RC box	3	Monitoring
Leeds	Waddington's Railway	Leeds	A61	Weak footways Pier suffers from extensive cracking	3	Monitoring Footway protection
Leeds	Clay Pit Lane Junction	Leeds	A58/ A64 (M)	Weak cover slabs to services under verge	3	Monitoring Verge protection
Leeds	Hough End	Leeds	A647/ A6110	Weak half joints		Monitoring
Leeds	Ivy Street	Leeds	A64	Pier problems	17	Monitoring
Leeds	New Wellington River	Leeds	A58	Weak service bay slabs in footway	0	Monitoring Footway protection
Leeds	Wellington Canal	Leeds	A58	Weak service bay slabs in footway	0	Monitoring Footway protection

District	Structure Name	Owner	Route	Substandard Elements	Assessed Capacity (tonnes)	Interim Measures
Leeds	Blenheim Subway	Leeds	A58	Roof slab	38	Monitoring Strengthening in progress
Leeds	Portland Subway	Leeds	A660	Roof slab	17	Monitoring
Leeds	Wetherby	Leeds	A661	Weak multispan arches	7.5	Monitoring
Leeds	Harewood	Leeds	A61	Spandrel walls	7.5	Monitoring
Leeds	Queens Square Subway	Leeds	A58 (M)	Roof slab	17	Monitoring
Leeds	Calverley River	Leeds	A6120	Weak footway	7.5	Monitoring Footway protection
Leeds	Town End	Railtrack	A642	Arch ring	7.5 (to be confirmed)	None currently
Leeds	Roman Ridge	Railtrack	A656	Arch ring	7.5 (to be confirmed)	None currently
Leeds	Dewsbury Road	Railtrack	A653	Longitudinal beams	17 (to confirm)	None currently
Leeds	Dragons Bridge	Railtrack	A58	Carriageway Cast iron edge beam next to footway	40 (to be confirmed) Group 2 FE (to be confirmed)	None currently
Leeds	Pool Bank Bridge	British Rail Property	A658	Transverse girders	Less than 40 (to be confirmed)	None currently
Leeds	CSO Dewsbury Rd	Yorkshire Water	A653	Steel beams in roof slab under verge	Less than 3 (to be confirmed)	None currently
Leeds	CSO Harrogate Rd	Yorkshire Water	A61	Steel beams in roof slab	7.5 (to be confirmed)	None currently
Wakefield	Doncaster Road Canal	Wakefield	A638	Service bay cover slabs Edge beams	Zero 7.5	Footway protection planned
Wakefield	Tanshelf	Wakefield	A639	Service bay cover slabs Central reserve slabs	3 0	Footway protection planned
Wakefield	Newmiller Railway	Wakefield	A61	Edge girders	7.5	Verge restrictions
Wakefield	Bridge Road	Railtrack	A642	Service bay floor plates under the carriageway Edge girder	Zero 3	Monitoring Footway protection planned
Wakefield	Warmfield	British Rail Property	A655	Edge girders Floor plates under footway and carriageway	7.5 7.5	Footway protection planned Monitoring

*Table 5: Substandard Structures on Principal Roads – Position at 31 March 2000*

52. If funding is provided at the level of the bids included in the plan it is envisaged that restrictions on principal roads in West Yorkshire can be maintained at an acceptable level. Whilst monitoring is being widely used across the County it must be recognised that this can only be used as a short-term measure. A reduction in funding would lead to the imposition of more restrictions and to the restrictions being in place for extended periods resulting in increased traffic disruption and inconvenience.

53. As part of the management of sub-standard bridges Leeds is currently assembling data relating to the potential effect on the network of the application of further interim measures.

54. Bradford has recorded long lengths of sub-standard retaining walls on principal roads. This will be reflected in other Districts and on other routes as the identification and assessment of walls proceeds.

## **STRENGTHENING OF STRUCTURES**

### ***Bridges***

55. Strengthening schemes have been prioritised in accordance with the strategy on a County wide basis for the years 2001/2 and 2002/3 and on a District wide basis for the years 2003/4 to 2005/6. It is intended that the priority lists will be reviewed year on year in order to maintain 2 years forward programming on a Countywide basis. The scheme justifications are included in the Programmes Appendix . Where the estimated cost of schemes is in excess of £1million, the programming of the required work has, where possible been spread across more than one financial year in an effort to achieve a more even level of spend year on year.

56. In determining the required carrying capacity of bridges it is accepted that it may not be economically viable, environmentally acceptable or necessary for all structures to be capable of carrying 40 tonne vehicles. Each structure has been critically examined in accordance with the Strategy to ascertain:

- whether it is essential to carry out the strengthening;
- if suitable interim measures can be applied
- if a weight limit can be applied either short term or long term;
- if necessary, the bridge can be closed and a suitable alternative route found either short term or long term.
- the load carrying capacity to which the bridge is required to be strengthened

57. To date 148 bridges have been strengthened in West Yorkshire. The focus of this has been to ensure that the Primary and Principal Route network is capable of carrying 40T vehicles. However, there are many weak structures which are not on the PRN or on Principal roads but which have a very low assessed load carrying capacity and which require strengthening.

58. Problems are experienced when load carrying capacities of less than 17 tonnes are identified; as this precludes use by most fire engines, buses, refuse vehicles etc. In the majority of cases the imposition of permanent or even temporary weight restrictions would prevent reasonable access and delivery of essential services to sections of the

community and to local industry and for this reason these restrictions have been avoided wherever possible.

59. It is accepted that priority should be given to strengthening structures on the PRN however, there is little merit providing a network capable of carrying 40 tonne vehicles if these vehicles cannot reach the required destination due to weight restrictions elsewhere.

60. Strengthening of Railtrack bridges requires significant expenditure. An agreement between Railtrack and the CSS, representing Local Authorities nationally, has been reached over the level of contribution to the costs of strengthening bridges.

61. Slow progress in the processing of assessments through Railtrack's approval systems has made it difficult to programme and budget for strengthening works to sub-standard Railtrack owned bridges. Railtrack is also engaged in a programme of works to its rail over-road bridges. The timing of these works has implications on both road bridge strengthening and other highway works through conflicting requirements for traffic diversions.

62. Estimates of the likely contributions to strengthening costs by the districts have been made and included in the programme. However, because the level of contribution is dependent on Railtrack's load bearing obligations, the level of bid for individual structures may be subject to change in future submissions.

63. A significant number of Railtrack owned bridges are in traffic sensitive areas. Restrictions on the use of these bridges has resulted in major disruption and in some cases, the need to divert HGVs through built up areas containing residential properties and schools as well as business and retail premises.

64. It is important that as finance is made available, responsibilities for each element of the strengthening cost and its phasing are planned and programmed to enable the works to progress. As strengthening works require integration of the budgets of both Railtrack and the councils it may be necessary in some cases to depart from the prioritisation strategy to ensure council contributions tie in with Railtrack's commitment to scheme finance.

### ***Retaining Walls***

65. Burr walls and retaining walls form a major part of the County's highway structures stock. There are several hundred kilometres of structural highway walling (greater than 1.2 m high). A high proportion are of dry stone construction, over 100 years old and reaching the end of their useful life. The regular use of HGVs both within urban and rural areas has imposed increased loading on many of these walls at a time when their condition has deteriorated due to weathering, pollution and the effects of heavy traffic.

66. The location of many walls in steep-sided valleys means that measures such as road closures, traffic diversions and carriageway restrictions are often not appropriate because of the length of required diversions and insufficient carriageway widths. Interim measures such as propping or traffic signal control can only be considered as short-term solutions. The result of this is that at present much of the expenditure is demand driven to deal with walls that have already collapsed or are showing significant signs of failure.

67. The exercise in identification and assessment of walls is ongoing and is expected to identify the requirement for significant expenditure on strengthening over the coming years.

**Monitoring and Interim Measures**

68. The introduction to Advice Note BA79/98 ‘The Management of Sub-standard Highway Bridges’ recognises that residual work arising from the Bridge Assessment and Strengthening programme will continue for some time after the target completion date of 1 January 1999. Strict application of the interim measures described in BD21 would lead to ‘widespread traffic disruption and considerable expenditure of scarce public funds.’

69. The assessment failure of a highway structure will result in the requirement for immediate expenditure in the form of one or more of the following:

- the introduction of appropriate traffic management measures;
- the implementation of a structural monitoring regime to ensure the safety of highway and other users;
- where appropriate, further more rigorous assessment of the structure.

70. As the assessment programme nears completion the number of structures requiring such measures is likely to increase. In recognition of this, realistic projections of expenditure on these items have been made over the 5-year Plan period. However, should the allocation for bridge strengthening fall short of the bid, expenditure will be required for interim measures and monitoring will increase. Further, this expenditure will not achieve an overall improvement in the condition of the highway structure stock.

**MAINTENANCE OF STRUCTURES**

71. In addition to the programme for strengthening highway structures there is also an increasing need for structural maintenance works in order to sustain the structures stock. The importance of structural maintenance work has been highlighted in both the Highways Agency paper ‘Performance Objectives, Indicators and Targets for the Maintenance of Highway Structures’ and the CSS Bridges Group report ‘Funding for Bridge Maintenance’. In particular the latent problems associated with under funding of structural maintenance work are stressed.

72. Broadly in line with the recommendations of the above two documents, the estimated required annual expenditure on structural maintenance is 0.85% of the Gross Replacement Cost of the structures stock.

73. This is split into 0.35% spent on preventative work and the remaining 0.5% spent on essential work.

74. The programmed structural maintenance workload for the next 5 years is shown in Table 6 below, together with the target expenditure on structural maintenance of structures and retaining walls in Table 7.

	2001/02 £000s	2002/03 £000s	2003/04 £000s	2004/05 £000s	2005/06 £000s
--	------------------	------------------	------------------	------------------	------------------

Bradford	60	355	977	1,250	1,291
Calderdale	330	179	173	163	619
Kirklees	800	650	1,200	990	900
Leeds	585	1,417	1,372	938	1,796
Wakefield	87	119	290	476	163
TOTALS	1,862	2,720	4,012	3,817	4,769

*Table 6: Programmed Structural Maintenance Work*

	No. of Structures	Km of Retaining wall > 1.2m	Yearly Grand Total
Bradford	520	100	
Calderdale	428	275	
Kirklees	669	400	
Leeds	714	120	
Wakefield	227	20	
<b>TOTALS</b>	<b>2445</b>	<b>815</b>	
Estimated Replacement cost (£000)	549,970	823,500	
Yearly Structural Maintenance Expenditure Requirement at 0.85% of Replacement Cost (£000)	4,675	7,000	11,675

*Table 7: Structures Replacement and Maintenance Requirements*

75. It can be seen that as the bulk of the strengthening programme is completed, the available funds are being directed at structural maintenance works.

76. Preventative work is seen as the most effective way of keeping the costs of replacement and rehabilitation of the structures stock at a manageable and steady level.

77. A substantial part of the current and planned structural maintenance workload is represented by those structures that have been affected by chlorides originating from the use of de-icing salts and a lack of effective waterproofing. As such preventative works to ensure the integrity of waterproofing systems represent an excellent opportunity to minimise the remaining whole life costs of structures.

78. A good example of this is the refurbishment of Hebble Viaduct in Halifax, where rectifying waterproofing faults now will drastically reduce the predicted remaining whole life costs of the structure (Hebble Viaduct Impact Study Report).

79. General Inspections are carried out at least every two years in order that routine and preventative maintenance can be identified before the problem develops to require more costly essential maintenance.

80. Principal Inspections, which involve a detailed examination of all surfaces of the structure, are being carried out every six years. These often recommend further Special Inspections to look at specific areas of concern, which in turn lead to preventative or essential maintenance. Funding for this activity is included in the programme.

## COMPLEMENTARY FUNDING

### *Local Authority*

81. In addition to the Local Transport Plan settlement, all the authorities continue to invest funding of their own towards the general maintenance of highway structures. Over the last 3 years a total of £3.9m of the authorities' funding has been invested in structural repairs and improvements across West Yorkshire (Table 8).

82. This investment has been spread throughout all five districts and has been targeted in the main towards works, but also towards regular and effective inspection regimes.

	1997/1998 (£000s)		1998/1999 (£000s)		1999/2000 (£000s)		Total (£000s)
	Works	Insp.	Works	Insp.	Works	Insp.	
Bradford	103	1	285	12	146	51	
Calderdale	418	13	500	26	444	24	
Kirklees	350	54	218	123	38	60	
Leeds	157	106	157	106	232	31	
Wakefield	73	6	73	6	81	7	
<b>TOTAL WORKS</b>	<b>1,101</b>		<b>1,233</b>		<b>941</b>		<b>3,275</b>
<b>TOTAL INSPECTIONS</b>		<b>180</b>		<b>273</b>		<b>173</b>	<b>626</b>

*Table 8: Complementary Funding by Local Authorities*

83. Local Authority funding (revenue and capital) is anticipated to continue at levels comparable to those shown in Table 8.

### **Works**

84. The £3.3m spend on structural maintenance and repair works has included items such as deck waterproofing, repairs to joints, re-building collapsed retaining walls, repainting of steel work, pressure pointing and many other minor repair works.

85. It is hoped that in the future these structural maintenance works can be funded through capital allocation, with the districts' own funds then being available to be targeted to essential routine maintenance works.

### **Inspections**

86. General and special inspections are regularly being undertaken. Over the past three years this has amounted to a cost of £626,000. This commitment to inspections is a key element in ensuring that resources are targeted towards the most needy areas and that value for money is achieved with respect to whole-life maintenance costs. It should be noted that the sum mentioned does not include the cost of undertaking Principal Inspections which it is hoped the capital allocation will cover.



### ***Private Sector***

87. Efforts will continue to be made to secure contributions from the private sector towards both structural maintenance and strengthening works. For example where assessment failures are identified on structures owned by Railtrack, BRPB, Yorkshire Water, etc negotiations will be undertaken to secure the appropriate contributions towards strengthening costs.

88. Recent successes include:

#### Calderdale

- £254,000 contribution (Railtrack) for Huddersfield Road Railway Bridge, Brighouse.

#### Kirklees

- £35,000 contribution (Private Developers) for retaining wall works at Crackenedge Lane, Dewsbury and Station Street, Meltham, Huddersfield.
- £600,000 from Millennium Commission/English Partnerships to replace two existing highway bridges as part of the Huddersfield Narrow Canal re-opening scheme.

#### Wakefield

- £800,000 full cost (Railtrack) Lumley Hill Bridge
- £210,000 full cost (Private Develop/Land Receipts) Denby Dale Road Bridge

#### Bradford

- £800,000 full cost (Railtrack) for New Lane Railway Bridge, Bradford
- £1 million full cost (Railtrack) for Cleckheaton Road Railway Bridge, Bradford

#### Leeds

- £17,000 contribution (British Rail Property Board), Arkwright Street Bridge.
- £1.4 million (approx) full cost (Railtrack) for Nineveh Road Railway Bridge.

### ***Commitment of Partners***

89. It is anticipated that the major and most likely partner in strengthening work will be Railtrack. The level of their contribution to any scheme will be negotiated in accordance with the national agreement between Railtrack and the CSS on behalf of Local Authorities.

## **LAND USE PLANNING**

### **INTRODUCTION**

1. The Local Transport Plan for West Yorkshire defines the transport strategy for the county for the five years between 2001 and 2006. Transport and land-use are closely linked and the purpose of this annex is to set out the relationships between the LTP and the Unitary Development Plans (UDPs). It has not been possible to prepare the LTP and UDPs in parallel as suggested in the LTP guidance because of the different timescales that each UDP has followed. However, we have developed a common spatial strategy for the LTP and considered a number of key issues and agreed a common approach. Finally, a position statement on each UDP is provided as required in the Government guidance. The LTP has been prepared to fit within the draft Regional Planning Guidance and Regional Transport Strategy for Yorkshire and Humberside whilst the UDP Annexes show where there are deficiencies within each UDP in respect of both the draft RPG and other Government guidance.

2. The current status of each UDP is shown in Table 1.

	Date adopted	Next stage
Bradford	1998	First deposit proposals to be published in Autumn 2000
Calderdale	1997	Draft review proposals April 2001
Kirklees	1999	Review when Regional Planning Guidance is adopted
Leeds	2001 (expected)	Modifications being prepared following Inspector's Report
Wakefield	1994	Initial Deposit Alterations, Dec 1999, intended to adopt in 2001

*Table 1: Current Status of West Yorkshire UDPs*

## **A SPATIAL STRATEGY FOR LAND USE AND TRANSPORT IN WEST YORKSHIRE**

### **CONTEXT**

3. Over the past 25 years a coherent and consistent land-use strategy has been developed across West Yorkshire. This has been characterised by concentrating development within the existing urban areas and on the edge of the settlements whilst allowing more peripheral development where this has promoted economic growth and regeneration. The West Yorkshire Structure Plan (1980) provided the first countywide framework whilst Strategic Guidance for West Yorkshire (SPG2 1989) developed the themes as the basis for the individual UDPs.

4. The UDPs of the LTP partners incorporate the development principles contained in SPG2 (1989) "to foster economic growth and to revitalise the urban areas, while ensuring the conservation of the countryside and the urban heritage". Whilst each

Council's UDP has different emphases, reflecting the local characteristics, there are strong common themes. These include regenerating older industrial areas, coal-fields or other disadvantaged areas and the local economy; protecting both the built and natural environments; providing sufficient housing in the right locations to meet the needs of the local community; and providing for the social needs of the community in land-use terms.

5. The Annexes dealing with each Council area expand upon the policy framework contained within each UDP.

### ***Regional Planning Guidance***

6. Regional Planning Guidance for Yorkshire and Humberside has carried forward this basic framework across West Yorkshire.

7. The first regional guidance published in March 1996 (RPG12) introduced principles in accordance with the approach of the UK Sustainable Development Strategy. To help achieve these broad objectives development was to be closely related to the existing settlement pattern (in areas of high public transport accessibility) and encouraged to help the regeneration of the most deprived areas. Significant incremental expansion of settlements likely to result in an increase in commuting by car to urban centres was to be avoided.

8. The second regional guidance ("Advancing Together: Towards A Spatial Strategy"), was published in draft form by the Regional Assembly for Yorkshire and Humberside in October 1999. This envisages development being concentrated in upgraded urban areas, near good public transport and (in rural areas) in market towns and larger villages. The draft RPG therefore continues the spatial strategy for West Yorkshire by maintaining the emphasis on the existing towns and cities as the main source of development land. The RPG, however gives greater emphasis to the re-use of previously used land. Building upon the changes in transport policy at the national level the RPG envisages a reduction in the reliance on cars and the provision of improved public transport and tighter patterns of development. 'Development Corridors', which start within the urban area, and have spare or potential public transport capacity, especially rail, are considered possible locations for new employment and housing, where development needs cannot be met within existing urban areas.

## **SPATIAL STRATEGY FOR THE WEST YORKSHIRE LOCAL TRANSPORT PLAN**

### ***Time Scale***

9. Draft RPG12 looks forward to 2016 and any replacement UDP can be expected to make provision of land for development for at least a ten year period. The LTP sets out a five-year programme but the land use consequences of proposals will be felt well beyond that period. It is important therefore that the five-year LTP programme is geared to supporting longer-term land use planning objectives. Consequently this spatial strategy looks further forward than the initial five-year period of the LTP.

### ***Distribution of Development***

10. The main features of the distribution of development in West Yorkshire are derived from the draft RPG and continue the themes established in the Structure Plan and Strategic Guidance. The key elements are:

- the concentration of development within the existing urban area and related to corridors with the potential for improvements to public transport;
- making best use of previously developed land in the urban area;
- increasing the intensity of development;
- linking development to improvements in public transport, cycling and walking;
- preventing sporadic development in locations difficult to serve by public transport;
- providing for sustainable links between homes, jobs and services.

11. These key elements represent criteria against which proposals for new development will be considered. This will have the following major consequences for the distribution of development in West Yorkshire:

- the continued consolidation and intensification of the main urban area comprising the built up areas of Leeds, Bradford and the Heavy Woollen District;
- the area to the south-east of Leeds will be the main focus for large scale economic development activity;
- intensification of urban uses in the urban areas of Huddersfield, Halifax and Wakefield;
- intensification of functional links between major centres in the urban areas serviced by improved public transport;
- transport corridors between the main urban centres which are served by rail (such as those between Leeds and Bradford and Leeds and Huddersfield) will be potential locations for new development;
- development proposals on open land outside the urban area in the West Yorkshire Green Belt will be resisted (Other than in exceptional circumstances new development will be within existing settlements);
- small to medium sized settlements in the former coalfield area will be a focus of regeneration activity to bring previously used land back into active use;
- Leeds city centre will be promoted as the regional capital and will continue to be the main location for commerce in the County;
- city and town centres of Leeds, Bradford, Huddersfield, Wakefield and Halifax will be the main locations for new retail and leisure development.

### ***Cross-Boundary Links with areas adjacent to West Yorkshire***

12. Links with adjacent areas will have a significant bearing on the future spatial development and transport requirements of West Yorkshire. The following links are of particular importance:

- between the former coal-field area of Wakefield District and the regeneration activity in the Dearne valley in South Yorkshire;
- commuting links to Leeds from the medium sized towns such as York and Harrogate and rural hinterland to the north;
- trans-Pennine links to Greater Manchester along M62 / Standedge corridor and east to the Humber ports;

- trans-Pennine links to Lancashire along the Aire and Calder valleys;
- between Leeds and Sheffield city centres, and the other main centres of South Yorkshire;
- leisure journeys, to shopping and entertainment venues and to adjacent national parks.

13. These strategic links should be the subject of improvements to public transport and measures to maximise the safe use of the existing road space.

## **COMMON KEY POLICY AREAS**

### **TRAVEL PLANS**

14. “Travel Plan” is the term used to describe what are otherwise known as green travel plans, green transport plans, commuter plans, mobility plans etc. The LTP Partners are committed to the use of Travel Plans as management tools. This will help to reduce the need for staff parking and also in the reduction in use of the private car. Our strategy for the promotion of Travel Plans is set out in the separate Demand Management annex.

#### ***Travel Plans, Existing Unitary Development Plans and Government Guidance***

15. None of the West Yorkshire Authorities have placed Travel Plans on a statutory basis in their Unitary Development Plans. Wakefield Council has however incorporated changes in the Initial Deposit version of its Revised UDP to indicate developers will be expected to prepare Travel Plans (further details can be found in the annex referring to Wakefield). The need to move towards a firmer basis for dealing with Travel Plans during the review of the existing UDPs or through the use of Supplementary Planning Guidance has been accepted by each partner authority. (See the Annexes relating to each UDP).

16. The draft revised PPG13 “Transport” gives further backing to the development of Travel Plans and suggests that it is reasonable to require developers to produce Travel Plans for certain types of new development.

17. Some employers are voluntarily developing Travel Plans in consultation with the local authority as they have recognised the benefits that can be derived for their businesses from this action. The LTP partners welcome and support such initiatives.

#### ***Travel Plans and Development Control***

18. The development control process gives an opportunity to seek to modify travel demands and habits. This can be through a requirement for Travel Plans to be submitted either alongside planning applications or as a result of legal agreements entered into through Section 106 of the Town and Country Planning Act 1990 (as amended by the Planning and Compensation Act 1991).

19. The presence of a Travel Plan will not be seen as mitigating the effects of a poor location, nor will it overrule the need to provide essential development related infrastructure such as walking or cycling links or highway improvements.

20. Common criteria have been agreed to define when a Travel Plan will be required and these are set out in Table 2.

Use Class	Development Type	Scale of Development
A1	Retail (food and non-food)	>1,000 M <sup>2</sup>
B1	Business	>2,500 M <sup>2</sup>
	Hospitals	>2,500 M <sup>2</sup>
	Education	>2,500 M <sup>2</sup>
D2	Assembly and Leisure	>2,500 M <sup>2</sup>
	Cinemas and Conference Facilities	>1,000 M <sup>2</sup>
	Stadia	>1,500 seats
The Councils consider that there is scope for requiring Travel Plans in the following additional circumstances to those proposed in the draft PPG13		
B2-B7	General Industry	>1,000 M <sup>2</sup>
B8	Warehousing	>1,000 M <sup>2</sup>
C3	Residential	Leasehold conversions over 50 apartments
D1	Health Centres/ Clinics/ Surgeries	By agreement

*Table 2: Circumstances when a Travel Plan will be required*

21. Travel Plans may also be required for smaller developments (for example, employment, shopping, leisure and services) which would generate significant amounts of travel. This requirement would be in locations where local initiatives or targets are contained within the development plan seeking the reduction of road traffic, or the promotion of public transport, walking and cycling.

22. An education based Travel Plan should promote safe cycle and walking routes to school, restrict parking and car access around schools and include provision for, amongst other things, on-site changing and cycle storage facilities.

#### Extensions to existing developments

23. Travel Plans will be required for extensions to existing development, where a Travel Plan is not already in existence and where the proposals meet the requirements above.

### **CYCLING AND WALKING**

24. The current UDPs largely predate changes in national policy signalled in the publication of PPG13 in 1994 and reinforced with subsequent policy statements including draft revised PPG13. The LTP partners agree that a number of matters will need addressing (either as part of the review process for each UDP or as part of the overall LTP) with respect to the needs of pedestrians and cyclists. (See also the section on Accessibility Criteria for Housing).

#### Key points from Government policy

25. Promoting a genuine choice of mode of travel will require significant actions to improve the attractiveness of walking and cycling. Some of these actions will require

amendments to the existing UDPs whilst others can be brought forward through the strategies developed as part of the LTP or through detailed implementation programmes.

#### Walking

- Review networks to ensure links between key uses are attractive;
- Design new development to promote walking as prime means of access;
- Promote high density mixed use development in and around centres and interchanges;
- Protect local services that are within easy walking distance of housing;
- Create more direct safe and secure walking routes to reduce walking distances between land uses and to public transport.

#### Cycling

- Review networks and identify measures to promote safe cycling;
- Design developments to promote cycling;
- Seek facilities for cyclists in town centres and interchanges;
- Promote cycle routes and cycle priorities in major developments.

#### Additional Local Matters

- Protect routes for West Yorkshire Cycle Network and National Cycle Network in UDPs;
- Use development proposals to deliver parts of the route;
- Use planning agreements to ensure facilities are delivered in new development;
- Improve design to make walking and cycling central to developments, safe and attractive.

### **ACCESSIBILITY CRITERIA FOR HOUSING DEVELOPMENTS**

26. Accessibility is a complex concept that measures the ease with which relationships between various essential activities can be achieved. It is dependant on both the general location of a site and site specific characteristics relating to local access. Access for disabled people is a prime consideration and can be helped by improving access for pedestrians and improved public transport.

27. Sites within centres or in corridors with good public transport provision will tend to have greater levels of accessibility, and also greater potential for increased accessibility, than sites in greenfield locations remote from the urban area. However, even in centres and corridors high levels of accessibility may not be achieved and there may be measures that can be taken to increase the accessibility of an individual site.

28. For housing development, accessibility will be a balance of the interrelationships with jobs, education and health facilities, shopping, leisure and local services by modes other than the private car.

29. PPG3 (2000) Housing provides advice to Councils regarding the allocation and release of land for housing development. In addition to the search sequence from PPG3,

for any housing development the following points should be addressed:

- Does the site allow easy access to everyday facilities and employment locations by foot, cycle and / or public transport?
- What improvements can be made to improve access to everyday facilities and employment locations?

- The needs of Pedestrians and Disabled People:

How will residents and visitors reach local bus stops, schools, shops etc? Will formal crossings be needed within the access arrangements? Will suitable provision be made for pedestrians with mobility problems? Will there be a need to improve any existing footpath routes outside of the site?

- The needs of Cyclists:

How will cyclists get into and travel through the site? What special provision needs to be made for cyclists to cross adjacent roads? Will improvements be required to routes leading to the site? Are adequate cycle routes and secure parking facilities available both for residents and visitors?

- Public transport facilities and information:

Are local bus stops close enough to the site and shelters and kerb heights appropriate for all users including those with disabilities? Is suitable service information provided?

- Car parking arrangements and provision:

The parking provision within the development should be adequate without being excessive. The layout of the development and the parking areas should be such as to make it more convenient to park in the site compared to adjacent roads.

## **PUBLIC TRANSPORT AND LAND USE PLANNING**

30. The framework for more sustainability in site selection can be found in Draft Revised PPG13 whilst PPG3 provides specific advice about choosing housing sites. Metro can assist in the planning process by providing comments on the public transport accessibility and sustainability levels of individual sites when consulted during the preparation of the UDPs or through consultations upon individual planning applications. The policy focus, within some UDPs however, needs reviewing to reflect the growing awareness of public transport accessibility. (This is addressed in the Annexes relating to each UDP).

31. A consultation process between Metro and the District Councils has been developed to consider planning applications. This is key to locating development in the right areas, namely those well served by public transport linking to key employment, shopping, leisure and healthcare services.

32. In assessing proposed developments, the following factors are considered by Metro:

- public transport provision to key locations;
- walking distance and pedestrian environment to bus stops / shelters interchange points and bus / rail stations;



- frequencies, first / last bus and journey times;
- quality of bus stop / shelter / waiting environment;
- accessibility of roads within proposed developments.

33. If, as a result of development an area would need public transport improvements and commercial operators are unwilling to provide services on viability grounds then contributions are normally sought from developers for a three to five year period. In the majority of cases, the developer would be expected to devise a Travel Plan and help promote the services by designing promotional material and offering free or subsidised travel cards to future employees or residents.

34. Metro intends holding a conference with planners, developers/landowners and consultants in order to devise a Best Practice leaflet, encourage better partnership working and devise low cost sustainable options for public transport improvements.

### **SUSTAINABLE FREIGHT DISTRIBUTION**

35. The movement of goods in a sustainable manner is a key element of the national integrated transport policy. UDPs can assist in achieving these aims through the spatial distribution of new economic development in locations where it can readily be served by rail or canal, and the encouragement of the use of rail and canal facilities by existing industries. Policies and proposals exist in a number of UDPs (see the individual statements on each UDP), and Councils currently consider opportunities for making use of rail and waterway for the distribution of freight wherever it is a feasible option in the context of determining planning applications. A number of projects which are part of the Leeds Pilot Initiative For Urban Distribution are described in the Sustainable Distribution of Freight Strategy, together with policy objectives and proposals relevant to the whole of West Yorkshire.

36. The West Yorkshire Planning Authorities support the work undertaken through the LTP process to develop the Sustainable Distribution of Freight Strategy, and also the publication of the separate handbook "Transporting Freight by Rail and Inland Waterways in West Yorkshire; A Guide for Potential Users", under the Centre of Excellence Initiative. The Planning Authorities will, in addition, seek to safeguard land in the UDPs for freight facilities where Railtrack or other agencies identify these as having potential or where additional rail capacity is required.

37. Reviews of each of the UDPs will allow further spatial dimensions to be added to the Sustainable Freight Strategy framework and greater emphasis placed upon the use of rail and waterways in the development of sustainable freight distribution.

## **UNITARY DEVELOPMENT PLAN POSITION STATEMENTS**

### **BRADFORD**

#### ***Introduction***

38. The Bradford Unitary Development Plan was adopted on 23rd January 1998. Preliminary work has commenced on the review of the Plan; the intention is to publish draft proposals in autumn 2000.

## **Overall Policies**

39. The adopted Bradford UDP is based upon the principles of sustainable development, and is consequently broadly in line with the objectives of the 1998 Government's White Paper on Transport, in spite of pre-dating that publication. Emphasis is on protecting and enhancing the environment, providing for the development needs of a growing population, the need for sustainable development, and to provide a framework for dealing with planning applications. Policy UDP7 states that 'the projected growth in road traffic will be restricted and its impact on the people of the district and the environment will be minimised'.

40. The adopted UDP is, in the main, supportive of the aims and objectives of the Local Transport Plan. There is no major change in direction of the UDP required to be compatible with the LTP, but there are a number of areas where policies will require review and updating

41. The review of the plan will be prepared with close reference to national policies and guidance, and also to the aims of the District 2020 Vision and the Councils emerging five year strategy which will replace the 1997-2000 community plan.

42. One of the key objectives of the 2020 Vision is: "*A District with a modern transport infrastructure which makes every part of it easily accessible to those who live within it and those who want to visit.*" The Vision also sees a much stronger economic relationship between Bradford and Leeds.

43. The delivery of the first five years of progress towards the Vision is set out in the emerging five year strategy which replaces the 1997-2000 Community Plan. The land use and transportation aspects of this strategy are predominantly found in a section dealing with homes and the environment. This includes targets to reduce development on greenfield sites, encouraging greater use of foot and cycle journeys and increasing the number of bus passengers on key corridors. Other parts of the five year strategy will also influence the content of the replacement UDP including the sections on the economy and jobs, fighting crime and improving health.

## **Specific Policies to be Reviewed**

### Major Transport Proposals

44. Policies TP6 and TP7, together with supporting text, describe a number of major Trunk and local authority road improvements which are to be supported, and the alignments which are to be protected. These policies and the lists of schemes require revision in the light of current policies and programmes. Some of the schemes have already been constructed, others programmed, and others abandoned completely.

### Parking

45. Policies TP9, TP10, TP11, TP12, TP13 and TP14 all relate to car parking issues. These policies, together with the 'Supplementary Planning Guidance on Car and Cycle Parking Provision' (approved in November 1997) need revising to fully reflect the Transport White Paper and other government guidance such as PPG13. The replacement of the existing minimum car parking standards with maximum standards when assessing the needs of new development is one such area requiring revision. This will enable a more balanced transport provision for access at new development, and will help to discourage car use.

46. A revised City Centre Car Parking Strategy, based on current Government policy and guidance, is being developed at present, to cover all aspects of car parking in the City Centre. This strategy will form the basis for revised policies to be incorporated into the UDP.

#### Travel Plans

47. At present UDP policies make no reference to Travel Plans, or for any requirement to consider any form of mobility management other than in the form of car and cycle parking provision.

48. No formal agreements have yet been reached with major employers in the District, though a number of recent applications have made reference to Travel Plans. At present these rely entirely on voluntary arrangements. The inclusion of a policy in the UDP requiring the submission of Travel Plans as part of a Section 106 agreement may help to secure formal agreements to introduce Travel Plans in the future.

#### Accessibility Criteria

49. The promotion of developments, which are accessible to all, is essential. Access to jobs, education, health and social facilities is a basic right for all of the community. Where possible, developments should be located such that the need to travel is minimised, and where travel is necessary, good access to developments by less polluting means of transport such as walking, cycling and public transport should be a prime consideration.

50. A high level of accessibility by public transport is essential if a significant sector of the community is not to be disadvantaged. Most public transport journeys in the District will continue to be made by bus. The location and design of new developments will continue to take account of the actual and potential accessibility to public transport. The Council will participate in promoting the full and effective use of public transport corridors.

51. At an urban level there is a need to focus developments in existing centres, or where activities will be well served by public transport. This may include raising densities at or around public transport nodes with high levels of access, such as town and district centres. Building up local neighbourhood centres will continue as an objective.

52. The Council is committed to the improvement of personal accessibility to new and existing buildings.

#### Commuted Payments

53. The Bradford UDP requires adequate provision for parking and servicing needs in minimum terms, the exception being in the City Centre where the benefits of a pedestrianised area are to be safeguarded. Here, developers are still required to provide for all of their access needs, but have other options including paying commuted sums for the Council to provide car parks on protected sites. There is also an option for provision of free staff travel on public transport. No formal agreements have been signed in Bradford though sites have been protected for commuted sum car parks in the centre of Bradford.

54. These policies may need revising in the light of revised policies for car parking and Travel Plans and in the light of advice in draft revised PPG13.

## ***Additional Land Use Policies Relevant to the LTP***

### Residential Design Standards

55. The UDP promotes good quality design. There will be a sustainable design guide developed. The Council currently applies the latest version of the DB32 Highways Design Guide, and the 'Companion Guide to DB32' issued in September 1998. The Council uses Planning Briefs for new developments which raise difficult design issues and opportunities.

56. The revision of RPG may have density implications for design standards. Given the shortage of land, the possibility of setting minimum density standards may be necessary in order to raise the average above 25 dwellings per hectare.

### Car free residential developments

57. There are no car free residential developments or formal community based car-sharing schemes planned in the District. Any suitable proposals for such developments or schemes will be welcomed in appropriate locations.

### Pedestrians

58. The Council has promoted pedestrianised town centres in Bradford, and in Shipley. The promotion of developments which provide safe and easy access for pedestrians will continue to be important, in line with the need to provide access to developments for all of the community (see above), and the programme of road safety measures will continue to have an important pedestrian focus. Proposals should support the adopted West Yorkshire Pedestrian Strategy where possible.

### Cycling

59. The Council's intention is to develop a high quality network of cycle routes suitable for all cyclists. Routes will include links to stations, and good cycle access to new developments, in order to promote cycling on a wide range of journeys, to work, education, and for social and leisure trips. The provision of good facilities for cyclists at new development will also be important, such as safe, secure parking for bicycles and shower and changing facilities.

60. There is a commitment to provide part of the National Cycle Network (NCN) in conjunction with Sustrans, and proposals should support the NCN and the adopted West Yorkshire Cycling Strategy where possible.

### Disused Railways

61. The adopted Bradford UDP protects some disused lines in Policy EN13, and should continue to safeguard options for expanding public transport systems as part of the promotion of integrated transport. It also seeks to encourage the movement of freight by means other than roads by promoting developments located such that they can be served by freight movements other than those made by road (Policy TP15). Consideration is given to minimising the adverse environmental effects of lorry movements through the location of parking and depots (Policy TP16). The revised UDP should continue to encourage alternative means of freight transport, both rail and waterway and consider the location of development in terms of the routes taken by lorries as well as parking and depot locations.

## ***Cross Boundary Issues***

### Links with North Yorkshire

62. Airedale and Wharfedale rail services are used by North Yorkshire residents who park and ride at stations within West Yorkshire but close to the County boundary e.g. Steeton on the Airedale line. These rail services to both Leeds and Bradford are heavily used at peak time and the existing car parks are at capacity. Whilst the Local Transport Plan proposes extensions to car parks at rail stations such as Steeton and Silsden, it is also proposed to explore fare structures that remove the incentive for residents of North Yorkshire to drive to West Yorkshire before boarding their train

63. New employment developments on land at Silsden and in North Yorkshire at Crosshills may generate additional car trips in the across the border in both directions.

### Trans - Pennine links

64. RailPlan 5 includes aspirations for improved local and strategic rail services including faster journey times and enhanced frequencies for services between Bradford and Manchester. The re-opening of the line between Halifax and Huddersfield offers greater flexibility in service planning. The Local Transport Plan recognises the importance of public transport links between Bradford and Leeds to support the District's 2020 Vision. A study is proposed for early in the plan period.

### Surface access to Leeds Bradford International Airport

65. Improved access to the airport creates cross boundary issues with Leeds and North Yorkshire and improvements are required to help deliver aspects of the District's 2020 vision concerned with improving the economic health of the district

### Sustrans Cycle Routes

66. Further opportunities can be grasped through the delivery of the National Cycle Network on the borders with Kirklees in the Spen valley and with North Yorkshire in the Aire Valley.

## **CALDERDALE**

### ***Introduction***

67. The Calderdale Unitary Development Plan was adopted on 30th April 1997. The Calderdale UDP is in the early stages of the review process. An "Issues Report" was published in June 2000 as part of the pre-deposit consultation required by PPG12. The Issues Report recognises the importance of consistency between the LTP and UDP and seeks views upon changes in policy direction, such as maximum parking standards, the need to refine policy in respect of the location of development and other issues. The Issues Report seeks to ensure that the revised UDP properly reflects Government advice, Regional Planning Guidance and the implications of the transport strategy as well as soliciting local views in order to reach a consensus regarding the scope of and need for change in the UDP. It is expected that draft proposals for change to the UDP will be placed on first deposit by April 2001.

68. The following section summarises the policies in the Calderdale UDP that are directly relevant to the Local Transport Plan.

### **Overall Policies**

69. The Calderdale UDP is generally supportive of the aims of the LTP although it was prepared during the early 1990s. However there are a number of areas where the UDP can be seen to be deficient. In particular it could not take account of the advice contained within PPG13 (1994) although many of the same themes are incorporated. Neither does the UDP take account of the Government's Transport White Paper or other subsequent advice. The review process will allow the UDP to be brought into line with the latest guidance and best practice advice. It is the Council's intention to rectify any shortcomings through the Review.

70. **Economic:** The main economic aims of the Calderdale UDP are for the creation of a sound economy capable of providing jobs and income for all those who seek and need work. This is to be achieved by providing land and buildings for job creation and retention which widen the range and choice of available opportunities, regeneration of the older employment areas, and encouraging job creating opportunities in locations which benefit from good public and private transport accessibility and communications.

71. **Social:** The Council's policy is to meet the needs and aspirations of all Calderdale's communities for good housing, health-care, schools, leisure, sports and arts facilities. The aims are to reduce inequality and to facilitate the highest quality of life. The promotion of equality of opportunity with respect to economic and social facilities is central to the Council's social aims and the need to integrate decisions on land-use with transportation/accessibility concerns is necessary if these objectives are to be met.

72. **Environmental:** Ensuring economic success and social well being through environmental protection and enhancement has been a feature of Calderdale's planning policies since the 1970s. This has been followed through in the UDP which seeks to protect and enhance the built and natural environments and to incorporate the aims of "sustainability" into the decision making process. The adopted UDP, however, pre-dates more recent policy developments with respect to sustainability and transport/land-use integration and therefore does not adequately reflect this issue. The forth-coming review of the UDP will enable these matters to be incorporated into the Districts land-use strategy.

73. **Transport Strategy:** The UDP seeks to provide a safe, efficient and integrated transport system which seeks to ensure equality of accessibility to employment, leisure, shopping, healthcare and other facilities and encourages the provision and use of public transport. The overall aim is the provision of an integrated land-use transportation strategy, which satisfies the travel needs of all. The UDP development strategy seeks to locate developments that generate many trips within or close to town centres, in order to encourage the use of public transport, and to generally reduce the need to travel. The UDP was developed before PPG13 (1994) "Transport" was released and therefore does not incorporate many of the specific objectives of that document. The new Draft PPG13 (1999) builds further upon the Government's policy directions and therefore the review of the UDP will need to take these matters into account.

### **Specific Policies to be Reviewed**

#### Major Transport Proposals

74. The UDP contains the following major transport proposals:

- Improvement of the north/south highway network to the east of Halifax town centre;
- The re-opening of the Halifax/Huddersfield rail passenger line (Services began in May 2000).
- The reopening of the Todmorden Hallroyd Curve to facilitate rail services between Todmorden and Burnley;
- New rail stations at Luddendenfoot, Hipperholme/Lightcliffe, Salterhebble, and possible Hallroyd (Todmorden);
- Improvements to main bus stations at Todmorden (completed) and Brighouse;
- Halifax Town Centre Traffic Strategy (work has started on this scheme);
- New/improved roads and junction improvements:
  - Hipperholme Cross Roads;
  - Sowerby Bridge Relief Road;
  - Calder and Hebble Junction (Halifax);
  - Ainley's Access Road, Elland.

75. Review of the UDP will allow the reassessment of these proposals against Government and sustainability criteria and to ensure consistency with the LTP.

#### Parking

76. The Calderdale UDP sets parking requirements as MINIMUM standards (Policies T19 to T24). Maximum levels are not set although constraints upon highway capacity would be seen as a constraint upon the levels of parking that would be allowed. The actual numbers of spaces have little altered since the parking standards were first introduced in the early 1980s and reflect the levels that were required by the previous Highway Authority.

77. Whilst the UDP has minimum requirements there are several different approaches that are contained within the Plan: -

- *Town Centres*; No parking is required for any development within designated town centres. There are no constraints however upon developers who wish to provide parking with their developments other than conservation and highway capacity concerns.
- *Halifax Comprehensive Improvement Area*; This designated area lies to the north, east and south sides of Halifax town centre. Parking in this area is to be kept to a minimum consistent with the operational needs of the development. This therefore allows spaces for deliveries and some essential parking but there are no provisions for general all-day/commuter parking.
- *Listed Building and Conservation Areas*; Within conservation areas and within the curtilage of listed buildings the Council may not allow parking to be provided depending upon the individual circumstances of each proposal.
- *The rest of the District*; Throughout the remainder of the district, the Council's MINIMUM parking requirements apply.

### Travel Plans

78. The UDP does not include policies seeking the provision of Travel Plans although there are some developments where they have been requested (e.g. Halifax General Hospital Extension). The Development Control process allows negotiation with applicants and has reached agreement to use Section 106 Obligations in some cases. The Council's Agenda 21 and other programmes are seeking both Travel Plans for employers and schools together with safe Routes to Schools Initiatives. The Review of the UDP will allow these matters to be put onto a more formal footing in accordance with the draft of PPG13 (1999).

### Accessibility Criteria

79. The UDP seeks to improve accessibility generally and to encourage development in accessible locations. However it does not set out how this accessibility is to be assessed. It does not incorporate accessibility profiles as required by PPG13 (1994) nor reflect the advice in draft RPG12 (1999). New policies will be required to ensure all development is located in the most appropriate and accessible location and to allow assessment of applications in a consistent manner.

### Commuted Payments

80. The Calderdale UDP does not make any reference to the use of commuted payments to provide for public car parking or public transport improvements. The Council has however successfully negotiated payments for specific bus services as part of the consideration of planning applications which have been achieved through Section 106 Agreements.

## ***Additional Land Use Policies Relevant to the LTP***

### Residential Design Standards

81. The UDP promotes good design and layout in all development. However the Government is generally seeking an increase in the density at which development, particularly housing is built. This means that there is a need to amend the general residential design standards (Space About Dwellings Policy N6) to facilitate higher densities. In addition the general reduction in parking Standards advocated by the Government may also have implications.

### Car Free Developments

82. The UDP does not specifically address this matter although within the town centres housing conversions have been undertaken where no parking is provided. There are however no controls in place to ensure residents do not have a car or to prevent them using town centre parking generally. Car free developments are acceptable in principle and the review of the UDP will consider the need to develop an approach to this form of housing provision.

### Pedestrians

83. The UDP recognises the importance of making provision for pedestrians and gives high priority to their needs in terms of highway design and traffic management. The adopted UDP accepts that pedestrian accessibility can be improved and made safer by the provision of better facilities and routes.



### Cycling

84. The Council believes that benefits can accrue from increasing cycling within the District. Whilst the topography of the area may be seen as a deterrent to using bicycles for some people and journeys it is considered that there is scope to encourage cycling. The provision of cycle lanes and routes, phasing at traffic signals and ensuring the needs of cyclists are considered from the outset in the design of highway schemes and traffic management can all assist to make cycling safer and increase its attractiveness as a transport mode choice.

### Disused Railways

85. There are a number of disused railways within Calderdale. These are protected from development in order that proposals for footpaths, bridleways, nature conservation or other linear features (including reuse for rail or roads) are not prejudiced.

### Location of Development

86. Locational policies within the UDP (Policies T1 and T2) generally reflect a desire for all development to be readily served by public transport by being within convenient walking distance of bus services, focal points on the public transport networks or near a railway station. New employment should be conveniently located in respect of the Strategic Road Network and where possible be accessible to the rail network to encourage freight distribution by rail. For retail development the “sequential test” (policy S1), advocates location of new stores within town centres in the first instance. Edge of centre or out of centre locations are acceptable only where there are no readily available more central sites and where they are conveniently located in respect of the transport network, are accessible by public transport and do not give rise to increased dependency upon the private car. The review of the UDP is likely to refine location policy to integrate land use and transport planning, to increase opportunities for travel other than by the private car and to further develop the principles of sustainability.

### ***Cross Boundary Issues***

87. Links with Greater Manchester and Lancashire to the west are of importance in the Calderdale context. Whilst there are no road proposals put forward in either the UDP or LTP to enhance cross boundary movement, longer term proposals within the Calderdale UDP include the re-establishment of the Todmorden Curve on the railway. This would enhance potential for services from Rochdale via Todmorden to Burnley and also allow Blackpool trains to call at the town. Accessibility would be greatly enhanced by this proposal.

## **KIRKLEES**

### ***Introduction***

88. The Kirklees Unitary Development Plan was adopted on 1st March 1999. The plan will be reviewed when the current review of Regional Planning Guidance for Yorkshire and the Humber is completed.

89. This section summarises the policies in the Kirklees UDP and other land use related policies and programmes which are directly relevant to the LTP.

### **Overall Policies**

90. **Economic:** The Council has an economic regeneration strategy with four themes that aim to:

- strengthen and broaden the economic base;
- provide infrastructure and secure regeneration of buildings and their surroundings;
- improve the area's image and quality of life;
- initiate action for employment, including training.

91. **Social:** The Council's policy is to promote a flourishing community, involving the residents of Kirklees in community regeneration. Action is required to tackle poverty and deprivation, by facilitating and enabling improvements, particularly in the most deprived areas, and to meet the needs of the individual communities. The promotion of equal opportunities is central to the creation of a flourishing community.

92. **Environmental:** The Council aims to achieve sustainable development to help make Kirklees an increasingly attractive and healthy place to live and to sustain economic development.

93. **Transport Strategy:** The transport strategy in the UDP is that priority be given to:

- satisfying the needs of all sections of the community through an effectively integrated transport system with emphasis on improving public transport and encouraging a modal shift away from travel by private car;
- promoting a transport network on which it is safe to travel and which causes minimal disturbance through danger, noise and air pollution;
- co-ordinating land use change with transport provision so as to minimise the need to travel and locating new developments where it can best be served by public transport and where it minimises the need for expansion of the highway network.

94. The strategy requires improvements to accessibility in locations throughout the district to support the land use proposals in the UDP. In particular to support the regeneration of the existing built up areas which are the focus of the land use proposals in the plan.

### **Specific Policies to be Reviewed**

#### Major Transport Proposals

95. The UDP contains the following major transport proposals:

- the re-introduction of a Huddersfield-Bradford rail service via Brighouse and Halifax; (services began in May 2000).
- the restoration of Huddersfield Narrow Canal;
- A62 Manchester Road, Longroyd Bridge, Huddersfield - carriageway widening and junction improvement;
- Huddersfield town centre improvements.

### Parking

96. Parking is an essential element in the overall strategy for transport and the provision made for car parking can have an important bearing on the use of the highway network. Control of the size, location and type of car parking can be used to help achieve an overall approach to transportation.

97. The UDP sets the maximum level of car parking generally allowable for different types of land uses. Lower levels of provision will be appropriate where the proposed use can still operate effectively or the developer wishes to provide less spaces, unless there will be significant adverse consequences for road safety or traffic management. Where accessibility to public transport is high, lower levels of car parking for staff may be appropriate. This will encourage a shift away from use of the private car. In suitable locations, improvements to public transport provision and measures to increase cycle use can be secured through planning obligations related to planning permissions.

98. In town centres, parking provided in new developments should be managed to serve the centre as a whole.

### Travel Plans

99. The UDP does not include provision for Travel Plans, however the Council are taking measures to introduce them.

### Accessibility Criteria

100. To improve personal accessibility, the UDP encourages a more energy efficient and less polluting pattern of travel taking account of the needs of those who are disadvantaged in their ability to avail themselves of transport facilities. A large proportion of the population does not have priority use of a car, so a high level of accessibility by public transport is essential if a significant sector of the community is not to be disadvantaged. Highway improvements will therefore be directed at alleviating problems, which impede bus services, and to create better integration between bus and train services.

101. The scope of walking and cycling to improve accessibility to facilities should not be underestimated. A large proportion of all journeys are very short and improvements to create safe and convenient access on foot and by cycle will constitute an important part of the approach to improving personal accessibility. Such improvements can complement public transport facilities by providing attractive routes to reach public transport or to travel from it to a final destination. They may also be beneficial in their own right to link homes to work places, retail areas and social facilities.

102. The UDP strategy is concerned with strengthening and broadening the economic base of the district. Whilst attention to improvements in personal accessibility will help the economy by assisting customers and employees to access businesses, the movement of goods may need to be assisted where difficulties are experienced which are holding back regeneration, hindering the operation of existing firms, or discouraging inward investment.

### Commuted Payments

103. Poor public transport accessibility is considered to exist in those areas which are beyond walking distance (around 400m) of public transport provision with a service frequency of 4 or more services per hour, daytime and 2 or more per hour, evening.

When planning applications for developments of a significant scale are submitted, detailed assessments will be required of public transport services, and of access arrangements for pedestrians to those services. This will take into account distance, gradients and the quality of the pedestrian routes. Where the assessment shows that accessibility to public transport is poor, arrangements will need to be put in place to secure improvements before planning permission will be granted.

### ***Additional Land Use Policies Relevant to the LTP***

#### Traffic Calming

104. To protect residential communities from the adverse environmental impact of through traffic and heavy goods vehicles traffic calming measures will be introduced, including street narrowing, street closures, road humps and parking controls to re-route non-essential traffic onto the strategic network. Further consideration needs to be given to the possibility of introducing 'home zones' and 20mph zones in new residential areas.

#### Residential Design Standards

105. The UDP promotes good quality design. The good practice guidance issued to support DB32, which provides more specific advice on design and transport, is being applied in Kirklees.

#### Car Free Residential Developments

106. Car Free Residential Developments and Car Share Clubs have not been introduced in Kirklees.

#### Pedestrians

107. The UDP recognises the importance of making provision for pedestrians. Measures are required to upgrade existing routes and to provide safe, convenient and pleasant routes in association with new developments.

#### Cyclists

108. The UDP identifies strategic cycle routes and requires developers to have regard to the needs of cyclists.

#### Disused Railways

109. The UDP protects disused railway lines from development which would prevent their reuse for transport purposes.

### ***Cross Boundary Issues***

110. Trans-Pennine links along the M62/Standedge corridor and east to the Humber Ports are important to the economic well-being of the district. Whilst the widening of the M62 west of Huddersfield, as safeguarded in the UDP, was withdrawn from the Trunk Road Programme, the expectation is that new investment will be directed at Trans-Pennine rail services. Railtrack has announced plans for improved freight distribution on the Trans-Pennine line and provision has been made for the potential to establish a strategic rail freight facility at the former Hillhouse Sidings close to Huddersfield town centre. A number of other sites available for development have the potential to be connected to the rail network.

111. Work on the Millennium Project to restore the Huddersfield Narrow Canal is well

advanced through a partnership of British Waterways, Huddersfield Canal Society, Oldham, Tameside and Kirklees Councils. The scheme, which is due to be completed in April 2001, will provide for leisure travel across the Pennines via Standedge Tunnel and give links to the national canal system.

## **LEEDS**

### ***Introduction***

112. Leeds Revised Draft UDP is as yet unadopted. The Inspector's Report on the Plan was received in 1999. It is anticipated that modifications to the plan will be published in 2000 and that the Plan will be adopted in 2001.

113. This annex highlights the aims, objectives and policies in the UDP, which are directly relevant to the Local Transport Plan (LTP).

### ***Overall Policies***

114. The approach of the UDP anticipates and embodies the principle of sustainable development now advocated by Central Government and reflected in national Planning Guidance and the White Paper on Transport. In this respect the Plan was ahead of government thinking on transport and land use when first placed on deposit in 1993. The Plan seeks to direct the location of future development, in ways which reflect the nature of that development, its implications for the environment, and its relationship with other land uses.

115. The Plan addresses patterns of movement between land uses, and seeks to minimise travel whilst supporting improvements to transport infrastructure. The UDP indicates in Strategic Aim SA2 and Strategic Principle SP4 respectively the importance of developing a safe and efficient transport system, and the need to give priority in the introduction of new transport infrastructure to supporting public transport (including new forms of transport).

116. As such the Leeds RDUDP supports many of the aims and objectives of the LTP. Indeed the Inspector's report into the RDUDP confirmed that the approach to transport set out in the Plan was consistent with the approach that Central Government wishes development plans to take and no fundamental change to the approach adopted has been suggested by the Inspector. However there will be some areas of the Plan that will require review at the earliest possible stage to increase the effectiveness of implementing the objectives contained in the Local Transport Plan.

### ***Specific Policies to be Reviewed***

#### **Major Transport Schemes**

117. Policies T18, T19 and T20 of the Leeds RDUDP set out the approach towards highways and description of the major road schemes to be pursued during the lifetime of the Plan. Some of these have been implemented; others have been reassessed by either central or local government. The Local Transport Plan will supersede this approach and the Leeds UDP will be reviewed following adoption to reflect this new approach. In the meantime the Local Transport Plan will represent the most recent statement of the City Council's approach.

### Parking

118. The Leeds RDUDP contains a range of different guidelines for different types of land use in varying locations. The philosophy is in line with advice in current PPG13 and PPG6 of controlling long stay commuter parking whilst at the same time ensuring an adequate supply of short stay parking in town and city centres to maintain their vitality and viability. Within the City Centre maximum limits for commuter parking and some residential development apply. Out of the City Centre guidelines are expressed as minimum requirements.

119. The Inspector's report on the Leeds RDUDP endorsed the approach adopted by the City Council in its strategy for parking, save for changing the existing minimum guidelines to maximums in line with advice in PPG13. Additionally the Inspector added a footnote to give the City Council flexibility to review these guidelines if in practice they provide for a level of parking above levels of demand. It is the City Council's intention to publish these changes to the Plan as modifications and to subsequently adopt them.

120. In reviewing the Polices in the UDP more refinement of parking policies will be required to take account of the approach adopted towards Road User Charging and Workplace Parking Charging. Car parking policy is a key tool in achieving the locational requirements of any land use plan and as such needs to be considered as part of a comprehensive thinking approach towards charging, commuted payments, Travel Plans and accessibility criteria.

### Travel Plans

121. Current UDP policies do not include any requirement for Travel Plans. Supplementary Planning Guidance in the form of a Sustainable Development Design Guide makes reference to the usefulness of the approach. Further use of Travel Plans could be pursued by the inclusion of a policy requiring their submission before the commencement of a development or by inclusion in Section 106 agreements.

122. It is hoped that the forthcoming review of PPG13 will provide further advice on how Travel Plans can be implemented through the planning system. Following this advice, policies could be included in the review of the RDUDP. In practical terms such a policy is likely only to apply to land uses that generate travel above a certain level or with above, for instance, 100 employees. At the same time however, policies on the use of Travel Plans will be needed in Local Transport Plans if existing businesses are to be persuaded of their usefulness in achieving more efficient and sustainable travel especially for the journey to work.

### Accessibility Criteria

123. The Leeds RDUDP makes no formal use of accessibility criteria. However, providing the opportunities for jobs close to where people live and concentrating on major generators of travel, especially for shopping and leisure trips is an implicit aim of the plan. In future, as work on the Local Transport Plan and advice from Regional Planning Guidance and the Regional Transport Strategy develops the use of accessibility criteria in the location of new development will become more relevant and will require inclusion in development plans throughout West Yorkshire. As mentioned earlier, the development of accessibility criteria will have implications for parking policy, policy on commuted payments, Travel Plans and the development of Road User

Charging and Workplace Parking Charging. There will need to be good communication between all of these areas of policy development.

### Commuted Payments

124. The Leeds RDUDP contains policies for the use of commuted payments for the provision of off-site car parking and contributions to public transport for developments within the City Centre. The Policies have been developed through the use of Supplementary Planning Guidance to seek contributions to the proposed Leeds Supertram system for developments falling within a defined catchment of the three Supertram Lines. With the introduction of accessibility criteria, the trade-off with developers in terms of transport infrastructure requirements will become more important.

125. As Policy develops development plans will need to indicate how developers will be encouraged to contribute to the sustainable transport access of their sites, not just in proximity to Supertram lines but for all types of development. Again policy development will have to reflect changes in Parking Policy and Road User Charging and Workplace Parking Policy in order to avoid any disincentive to locating in non-sustainable locations and encourage development in town and city centres. At the same time care needs to be taken to ensure that no undue strain is placed on the public transport system by virtue of developments failing to contribute to the additional burden they may place on the existing system.

### ***Additional Land Use Policies Relevant to the LTP***

#### Provision made within developments for cyclists and motorcyclists

126. Policies to provide for cyclists are included within the Leeds RDUDP and proposed changes that will become formal modifications to the plan have been advanced to ensure that the needs of cyclists are considered in all developments. Implementation of these policies requires greater work, and the current parking guidelines for cycle provision will require review. In reviewing the policies on cyclists the development of an approach towards Powered Two Wheelers will also be possible.

#### Rail Halts

127. There are a number of proposals for Rail Halts within the Leeds RDUDP. In reviewing the plan the scope for additional halts should be revisited and expansion of the number of opportunities may be possible.

### ***Cross Boundary Issues***

128. Important initiatives in the Leeds RDUDP relating to travel to and from North Yorkshire include the construction of the M1-A1 Link Road, East Leeds Link Road, Park and Ride and the desire for the provision of a new additional railway station in the eastern side of the City Centre.

129. The M1-A1 Link Road is important in providing an alternative route for traffic from the south and west of Leeds to the North East and North Yorkshire. Together with the East Leeds Link Road greater accessibility to the Aire valley Employment Area will generate substantial growth in jobs for the benefit of the Region.

130. Park and Ride is planned in association with improved public transport such as Supertram, guided bus and rail. Park and Ride will be of benefit in reducing the number of cross boundary commuters who enter Leeds City Centre by private car.

131. Finally the provision of a new and additional rail station on the eastern side of the City Centre will improve capacity for commuters from North Yorkshire.

## **WAKEFIELD**

### ***Introduction***

132. The Wakefield Metropolitan District Unitary Development Plan (UDP) was adopted on 6 December 1994. The plan is under review. It is anticipated that limited alterations to the plan, including rolling the end date of the plan forward from 2001 to 2006 will be adopted late in 2001. A subsequent comprehensive review will be undertaken between 2001 and 2006 to take the UDP forward to 2016, in the context of revised Regional Planning Guidance. On 25 November 1999, the Council published limited alterations to the UDP. The alterations known as the 'Wakefield Metropolitan District Unitary Development Plan Review Initial Deposit Alterations' which were placed 'on deposit' for formal consultation between 16 December 1999 and 26 January 2000.

133. This annex highlights the aims, objectives and policies in the UDP which are directly relevant to the Local Transport Plan (LTP).

### ***Overall Policies***

134. The Wakefield UDP is broadly in line with the objectives of the Local Transport Plan, although as the UDP was prepared during the early 1990s there are some differences in emphasis. In particular the preparation of the Wakefield UDP predates the publication of PPG13 and the draft revision to PPG13. These set out the objectives of reducing growth in the length and number of motorised journeys, encouraging alternative means of travel with less environmental impact and thus reducing the reliance on the private car. Nevertheless, the UDP does encompass many of the aspirations of PPG13, the draft revision to PPG13 and the LTP.

135. The overall aim of the Wakefield UDP is "*to contribute to improving the quality of the life of residents of Wakefield District.*"

136. The aims of the Wakefield UDP are:

- to foster economic growth by encouraging the provision of a balanced range of employment opportunities
- to revitalise the coalfield communities
- to conserve and enhance the quality of the environment
- to provide for and safeguard a high standard of accessibility for all sections of the community

137. The main areas where the Wakefield UDP is not directly in line with the objectives of the LTP are:

- no specific reference to sustainability
- no specific reference to maintenance of the transport infrastructure
- issues relating to climate change are not addressed
- no targets set for the reduction in accidents, in car traffic or for the increased use of public transport



138. The Council has promoted alterations to the UDP to place sustainability and promoting sustainable development at the core of the development strategy.

139. **Transport Strategy:** The overriding transport aim is to satisfy travel needs, by providing for and safeguarding a high standard of accessibility for all sections of the community, including industry and business, and by improving travel conditions. The UDP incorporates three transport objectives:

- To facilitate the operation of a comprehensive, efficient and attractive public transport network
- To minimise the creation of substantial congestion
- To minimise the need to travel

140. The strategy promotes a balanced and integrated transport system, which should maximise travel opportunities and encourage the efficient and effective use of transport resources. It exploits the advantages offered by public transport and recognises the fundamental interaction between transport and land use development. The strategy seeks to relate new development to existing transport infrastructure and, in particular, to public transport services, to avoid badly sited development, which might add to the existing transport problems or create new ones. It encourages development within convenient walking distance of railway stations, other public transport focal points and existing bus routes.

141. The Council has promoted alterations to the UDP to reinforce the emphasis on promoting sustainable development. Amendments to the Transport policies seek to maximise travel opportunities by alternative modes to the car and manage the demand for travel. Proposals for development will need to be located in accessible locations.

### ***Specific Policies to be Reviewed***

#### Major Transport Proposals

142 The UDP contains the following major transport proposals:

- South East Link Road ( A628 Ackworth Bypass, Featherstone Bypass, Pontefract Western Relief Road)
- Hemsworth Bypass - Now open
- Hemsworth - A1 Link Road
- Wakefield Western Inner Relief Road
- Denby Dale Road / Ings Road Improvement - Now complete
- A61 - A642 Link Road - Private sector funded scheme
- Normanton Bypass - Phase 1- Now open

143. The Council has not promoted alterations to the unimplemented schemes in the current limited review of the UDP. Major transport proposals will be reassessed in a subsequent review in the light of revised Regional Planning Guidance, Regional Transport Strategy and Local Transport Plan. Consideration will be given to including the current schemes, or any alterations, in a future LTP five-year programme.

144. The UDP contains the following Highways Agency proposal:

- Upgrade A1 to motorway standard - now only between Ferrybridge and Hook Moor

### Parking

145. Parking is a fundamental element of transport policy. The level and location of provision and the charging policy influence the demand for road space and the viability of commercial centres.

146. The UDP makes reference to the Council's approved car parking standards. These standards currently set minimum criteria to be satisfied. Developers are currently expected to provide sufficient parking space to cater for the demand generated by their development, subject to the constraints of highway capacity and the impact on other road users, road safety, residents or the environment. Wherever possible parking provision should be made off-street. In town centres car parking is controlled and precedence given to short stay spaces. The UDP promotes the full use of public car parks in town centres, as well as developer contributions to the cost of such provision as an alternative to separate developer provision.

147. The Council has promoted alterations to the UDP to realign its parking policies with the latest Government guidance and principles incorporated in the LTP. The provision of parking in developments for cars, motor cycles and pedal cycles will be determined in accordance with maximum standards for broad classes of development and location. Car parking provision will also be subject to the constraints of highway capacity and the impact on other road users, road safety, residents or the environment.

### Travel Plans

148. The UDP does not currently include provision for Travel Plans. However, the Council has indicated in its UDP Review Initial Deposit Alterations that developers will be expected to provide a Travel Plan to cover all transport requirements associated with new development. Separate guidance and assistance will be made available by the Council.

### Accessibility Criteria

149. Providing for and safeguarding a high standard of accessibility for all sections of the community, including industry and businesses, is a key objective of the UDP. The plan encourages a land use pattern which minimises the need to travel and attaches priority for transport investment to the requirements of the public transport system. New development should be well located to public transport services. The availability of public transport provides benefits to the community at large, including business and industry, by providing a means of reducing delay, costs, pollution, accidents, conserving resources and sustaining a balanced population in settlements that might otherwise become restricted to those with access to a car. The scope of walking and cycling to improve accessibility to facilities is also recognised. A large proportion of all journeys are short and improvements to create safe and convenient access on foot and by cycle will improve personal accessibility. Such improvements can complement public transport facilities and use. Priority is attached to the needs of pedestrians and cyclists, notably in residential areas, particularly in the vicinity of schools and shops, and town centres where pedestrian and cycle usage is concentrated and where pedestrian / cycle/ vehicular conflict is most severe. The UDP seeks to ensure new residential development is within convenient walking distance (usually 1 km) of local facilities such

as primary schools, local shops, post office etc.

150. Good communication links are essential for fostering economic growth, for improving the attractiveness of the District for inward investment and for increasing the competitiveness of indigenous business and industry. In recognition of these factors the UDP incorporates a Strategic Highway Network, as a framework for highway investment.

#### Public Transport Corridors

151. The Council intends to define accessibility profiles to enable it to better relate new development to public transport services. Accessibility profiles will be used to assist in the determination of which types of development are suitable for which locations and on the appropriate parking standards to be applied.

#### Commuted Payments

152. The Wakefield UDP makes reference to the acceptability of developers making commuted payments for the provision of public car parking facilities in town centres, instead of providing their own car parking. There is no provision in the UDP for commuted sums for improvements of public transport facilities and services. Nevertheless, improvements to public transport might be achieved through Travel Plans and Section 106 Agreements. Commuted payments for car parking are no longer appropriate in the light of draft PPG13. The Council intends to promote further alterations to the UDP to encourage developers to contribute to securing sustainable transport access to new development.

### ***Additional land use policies Relevant to the LTP***

#### Residential Design Standards

153. The Wakefield UDP incorporates a Residential Design Guide as Supplementary Planning Guidance (SPG2), to promote a high standard of housing environment. Requirements regarding access, circulation, parking and garaging are based on Design Bulletin 32 and PPG13.

#### Car Free Residential Developments

154. Car Free Residential Developments and Car Share Clubs have not been introduced in Wakefield.

#### Pedestrians

155. The Wakefield UDP requires full consideration to be given to accommodating the needs of pedestrians in development proposals and appropriate provision be made in traffic management and highway improvement schemes.

#### Cyclists

156. The Wakefield UDP requires full consideration to be given to accommodating the needs of cyclists in development proposals and appropriate provision be made in traffic management and highway improvement schemes.

157. The Council has promoted alterations to the UDP to reinforce the emphasis on facilities for pedestrians, cyclists and people with special needs. Amendments to the Transport policies require developers to accommodate facilities for these people. Schemes to link to and provide new sections of cycle tracks / lanes to extend the

network will be promoted.

#### Disused Railways

158. The Wakefield UDP protects disused railway lines from development to safeguard the potential of these linear corridors for future transport or leisure purposes.

#### Freight Transport

159. The Wakefield UDP requires that for development proposals incorporating road haulage of materials of substantial volume it must be demonstrated that alternative modes are environmentally unacceptable or impractical.

#### Highway Network

160. The Council has promoted alterations to the UDP to require developers to incorporate measures such as traffic calming or safety improvements to the existing highway, so that new development does not create or materially exacerbate problems of safety, environment or efficiency on the network.

#### ***Cross Boundary Issues***

161. There are a number of cross-boundary issues that affect the Wakefield area. Regeneration of the former coal mining areas of both Wakefield and Barnsley is a key regional issue. A number of schemes have been put forward to assist this area in the South Yorkshire LTP.

162. In response to this Wakefield has commissioned a study to develop a transport strategy for the regeneration of the coal-field area. This includes the potential role of the major highway schemes that could link to the M62 and A1 and the new highway infrastructure within Barnsley District, together with cross boundary bus and rail services and the potential role of rail freight.

## **CROSS BOUNDARY ISSUES**

### **INTRODUCTION**

People's transport needs do not recognise administrative boundaries. We are therefore working with neighbouring authorities to ensure that, as far as possible:

- joint proposals are developed for important cross-boundary corridors of travel;
- significant proposals close to administrative boundaries are discussed on a joint basis;
- links are developed to support economic regeneration on a regional and sub-regional level;
- public transport ticketing systems and concessionary fares arrangements are developed to assist cross-boundary travel;
- transport strategy objectives are not undermined by incompatible policies.

### **REGIONAL CONTEXT**

West Yorkshire forms a key part of the Yorkshire and the Humber Region. It contains over 40% of the Region's population and a higher proportion of the Region's employment. Whilst West Yorkshire contains a number of large, relatively free-standing urban centres, there are important cross-boundary transport issues, which affect West Yorkshire and its neighbouring areas.

The draft Regional Planning Guidance recognises Leeds as overwhelmingly the dominant economic centre of the Yorkshire and the Humber Region. The strength and continued growth of the Leeds economy has implications for travel patterns and has led to a growth in longer distance commuting.

The draft Regional Planning Guidance recognises that some planning decisions made in one LTP area can have significant cross-boundary effects. For example, large retail outlets attract shoppers from a wide catchment. Similarly, leisure developments such as out of town cinemas and sporting venues also have large catchments. Key cross-boundary planning issues are addressed in the Land Use Planning annex.

West Yorkshire is bounded by South Yorkshire to the south and south-east, Greater Manchester and Lancashire to the west and North Yorkshire to the north and east. There is also a short rural boundary section with Derbyshire.

The key cross-boundary corridors affecting West Yorkshire are:

With South Yorkshire

- M1 Corridor and parallel rail routes
- Wakefield – South Elmsall – Doncaster
- Pontefract/Castleford/Hemsworth – Barnsley/Dearne Valley

With Greater Manchester/Lancashire

- M62 West Corridor and parallel rail route
- Huddersfield – Oldham

- Halifax – Oldham/Rochdale/Burnley
- Keighley – Colne/Burnley

With North Yorkshire

- Bradford/Leeds – Keighley/Ilkley – Skipton – Yorkshire Dales
- Leeds/Bradford – Harrogate
- Leeds - Selby/York

With Derbyshire/ Peak National Park

- Trans-Pennine Movements

## **REGIONAL ORGANISATION**

Under the general umbrella of the Regional Assembly for Yorkshire and the Humber, various bodies exist to co-ordinate activities related to transport policies. These are:

- Regional Transport Forum, which has overall responsibility for Regional Planning Guidance which includes the Regional Transport Strategy;
- Regional Transport Group, consisting of elected Members from each of the Highway Authorities and the PTAs, the Government Office and public transport providers;
- Transport Officers' Group, chaired by Kirklees Council, with membership from each of the Highway Authorities and the PTEs, GOYH and other regional bodies;

In addition, under the auspices of the Regional Chamber, there is a Robust Infrastructure Commission, chaired by the leader of City of York Council, with membership consisting of officers from representative authorities, the Government Office for Yorkshire and the Humber (GOYH), other public and private transport providers and private companies;

Also, all West Yorkshire authorities, together with all Yorkshire and Humber authorities are members of TravelWise. The regional TravelWise group, which is led by Metro, ensures cross-boundary co-ordination of TravelWise activity and this is further reinforced by regional participation in the **Target** project. Further details of this are provided in the Demand Management Appendix.

## **SOUTH YORKSHIRE**

### ***Context***

There is increasing demand for commuting between South Yorkshire and Leeds, principally by car along the M1, with associated worsening problems of congestion.

The Wakefield District of West Yorkshire abuts the Barnsley and Doncaster Districts of South Yorkshire. This boundary is recognised to be somewhat artificial because of the strong relationship between the respective communities based on their historic coal mining heritage. Indeed a coalfields area has been defined for the purposes of addressing the economic deprivation caused by the demise of the coal mining industry. This area straddles the boundary, including the communities and former colliery sites of each affected District.

Investment in new employment within South Yorkshire as a result of its European Union Objective One status will create job opportunities that may be attractive to

residents of West Yorkshire, particularly within the coalfields area. South Yorkshire's Objective One 'Single Programming Document' sees the jobs likely to be generated in Leeds as providing employment opportunities for South Yorkshire residents and transport links with Leeds are therefore considered to be important.

Consultants, on behalf of the DETR, are currently carrying out the South and West Yorkshire Multi-Modal Study (SWYMMS). They are considering issues and problems associated with strategic transport links in the area defined by the motorway 'box', broadly comprising the M1, the A1 and A1(M), the M18 and the M62 in South and West Yorkshire. Recommendations for multi-modal solutions to the problems should be made towards the end of 2001. These may have implications for current proposals.

### ***Key Issues and Actions***

#### Leeds - Wakefield - Barnsley - Sheffield Corridor

Improving the Sheffield - Leeds rail link is identified as a key priority within draft Regional Planning Guidance and in the Regional Economic Strategy. The improvement of rail frequencies and journey times is a major requirement. West and South Yorkshire PTEs are commissioning a joint study to consider improvements to services.

Measures to improve bus services have already been initiated through the respective 'Centre of Excellence' programmes. In the A61 corridor between Wakefield and Barnsley, a cross-boundary quality bus partnership is being developed. A "Metromaster" ticket offering bus travel in West and South Yorkshire was introduced in 1999.

#### Regeneration of South East Wakefield and the Dearne Towns

The key issue is the need to foster economic regeneration of the coalfields area by attracting new industries and businesses and providing local employment opportunities.

The Wakefield Unitary Development Plan has allocated significant brownfield and greenfield sites for employment purposes. The major opportunities are located around junction 31 of the M62 at Normanton and Whitwood, but there are also large allocations in the south east of the district. Within the Dearne Towns area of the Barnsley District, redevelopment of the former collieries has been progressing, creating large numbers of new jobs.

To meet the criteria for sustainable development it is recognised that accessibility by public transport, cycling and walking needs to be greatly improved. The opportunities for distributing freight by rail and waterway also need to be realised. The respective authorities and PTEs have already made a start on developing cross boundary bus services to link the communities with employment opportunities. In addition there are existing regional rail services linking Leeds and Wakefield with Sheffield and Doncaster which have stations within the South East Wakefield and Barnsley / Dearne Towns areas.

Proposals are being developed for improvements at Moorthorpe Railway Station, including bus/rail interchange and to encourage links to Wath/Manvers regeneration area using employer-funded bus services from a mini-interchange at Swinton Station.

The former South Kirkby colliery site is well located adjacent to a main rail line and

the potential for providing rail freight connections is recognised. Nevertheless it is considered that to attract modern industry and distribution companies, it is vital for there to be good road connections to the strategic highway network. Over the last few years the highway network in the Barnsley District has been subject to major improvement with the provision of the Dearne Towns Link Road and the Coalfields Link Road. Whilst connections to the M1 are now in place, there remains a need to provide the connection to the A1 and hence to the M62.

The present lack of a suitable road link is resulting in increasing traffic flows, including high proportions of heavy goods vehicles, routing along the A628 from the south east and from across the boundary. This is creating severe environmental and safety problems in the communities of Ackworth and Pontefract. A major highway scheme, the Hemsworth - A1 Link Road, is included in the programme to provide the necessary connections to the A1 and M62 and to facilitate the introduction of measures to redirect traffic away from the affected communities. This scheme will be mutually beneficial for both districts.

### Cycling and Walking

The Trans-Pennine Trail is a multi-user route on the National Cycle Network that is being developed. It includes a spur between the main east - west route from Barnsley northwards through Wakefield District to Leeds, with an onward connection to other National Cycle Network links from Leeds to Bradford and Wetherby.

The South Elmsall, South Kirkby and Upton Ringway is a circular walking and cycling route which provides a more local facility for the communities on both sides of the boundary.

## **GREATER MANCHESTER AND LANCASHIRE**

### ***Context***

The M62 is the major east-west route in the north of England. It is a major transport link for the movement of freight from the ports of Liverpool, Hull and Goole and provides access to the airports of Liverpool, Manchester, Leeds Bradford and Humberside. It provides an all weather route between Greater Manchester and West Yorkshire and links the main towns and cities of West Yorkshire.

The main North Trans-Pennine rail route links Leeds, Dewsbury, Huddersfield and Manchester and is served by up to four trains per hour in each direction, however journey times are restricted by track curvature and capacity. Another Trans-Pennine service links Leeds, Bradford and Halifax with Burnley, Preston and Blackpool and other services run between Halifax and Manchester via Rochdale.

### ***Key Issues and Actions***

The bulk of the movements on the M62 are between West Yorkshire and Greater Manchester, 50% of journeys starting in West Yorkshire are trans-Pennine. Between peak periods, over 33% of traffic are goods vehicles. The high Pennine sections of the M62 do not operate at capacity but this soon changes when the more local traffic joins in both West Yorkshire and Greater Manchester during the morning and evening peak periods.

Traffic on the A646, A58 and A672 routes between Greater Manchester and Calderdale causes problems in the Calder Valley towns and Halifax. To a lesser



extent there are problems associated with traffic on the A62 and A635 in the Colne Valley towns and Holmfirth.

### M62 Route

The Highways Agency is currently carrying out consultation on a Route Management Strategy for the M62. This covers the whole of the M62 from Liverpool to Hull. The strategy aims are to:

- improve safety;
- improve traffic flow;
- encourage transport integration;
- improve the environment;
- provide better travel information.

In addition to the work that is currently being undertaken, the Highways Agency is considering:

- variable speed limits;
- designated lanes for high occupancy vehicles or lorries;
- traffic lights on entry slip roads;
- bus priority at junctions to assist local services;
- park and ride facilities to link to bus and rail services;
- more low noise surfacing and noise barriers;
- traffic control centres;
- providing up to the minute information on traffic conditions.

### Public Transport

The Pennine sections of both rail routes do not operate at capacity. However, this changes when people on more local journeys join in both West Yorkshire and Greater Manchester during the morning and evening peak periods. During these periods both trans-Pennine rail routes do not have sufficient capacity.

In the second round of rail franchising, it is planned to create a separate franchise covering Trans-Pennine rail services. This has attracted expressions of interest from a number of potential operators and will lead to enhanced services.

Cross-boundary tickets for bus and rail services between West Yorkshire and Greater Manchester is an issue that the two PTEs are seeking to address.

### Cycling

Whilst not a significant mode for major centre to centre cross boundary movements, cycling is of greater importance as a leisure mode. Even so, there is an unmet demand for short commuting trips within the corridor. The introduction of the National Cycle Network in the region, with co-operation on cross-boundary links such as the Calder Valley Cycle Route, which will link West Yorkshire to Rochdale and Greater Manchester, will help to satisfy that demand.

## **NORTH YORKSHIRE**

### ***Context***

The towns and villages of North Yorkshire, which are close to the West Yorkshire boundary, are a major source of peak time traffic flows into the districts of Bradford and Leeds. These areas also look to these cities as important centres for business and leisure and therefore links between the two areas are a significant issue, particularly within the northern and eastern fringes of the West Yorkshire conurbation. Similarly, traffic flows out of the conurbation to York, Harrogate and into the Yorkshire Dales National Park are a source of significant transport problems.

Arrangements have been put in place for regular liaison between West Yorkshire Authorities and North Yorkshire, City of York Council and the Yorkshire Dales National Park.

### **Airport Access**

There is significant 'leakage' of airport passengers from within the natural catchment area of Leeds Bradford International Airport (LBIA) to airports across the Pennines. In many instances, this will be to use flights not available from LBIA. Nevertheless, improved transport links to LBIA, resulting from implementation of its Surface Access Strategy should reduce unnecessary longer distance travel.

### ***Key Issues and Actions***

The key cross-boundary issues affecting West Yorkshire are shown below. These are divided into local and strategic issues.

#### **Cross-boundary commuting**

Commuting is a key issue, particularly in the Airedale-Bradford/Leeds, Harrogate-Leeds/Bradford and York/Selby-Leeds corridors. Such longer distance commuting appears to be on the increase. Car and rail are the main modes. This leads to increased traffic congestion on approach roads, in particular contributing to delays to local bus services, and use of rail services, leading to overcrowding and in some cases, passengers being unable to board at stations near the destination.

To address these issues, discussions have been held with a view to extending the scope of cross-boundary tickets to include travel in North Yorkshire in order to address cross-boundary fare differentials.

The proposed new rail station at Cross Hills included in the North Yorkshire Local Transport Plan should provide an alternative to driving to park and ride stations in West Yorkshire for commuters using the Airedale line.

Introduction of new class 333 electric trains on routes including Leeds-Skipton from Autumn 2000, replacing the existing 40 year old trains on these routes, will provide a more attractive, reliable and comfortable journey.

Cross-boundary bus services, for example between Leeds and Harrogate, have been improved through the provision of more attractive modern vehicles.

#### **Airport Surface Access**

Leeds Bradford International Airport is close to North Yorkshire's boundary and about 20% of its passengers come from North Yorkshire. It is also the nearest airport to York. Many movements from York and North Yorkshire to this and other airports pass

through urban areas of West Yorkshire.

North Yorkshire County Council has participated in the Leeds-Bradford International Airport Transport Forum, which has led to the publication of the airport's surface access strategy. This contains proposals that should result in substantially better access to the airport by public transport.

### Cycling

Whilst not a significant mode for major centre to centre cross boundary movements, cycling is of greater importance as a leisure mode. The National Cycle Network straddles the region and crosses boundaries, so a common approach to its implementation would be desirable. Cycling may have a role for short distance journeys to rail stations and cycle parking provision should therefore reflect this at appropriate locations.

Introduction of the National Cycle Network in the region is progressing, with co-operation on cross-boundary links where necessary such as the Harrogate to York route, which passes through West Yorkshire in the Wetherby area.

### Leisure Travel

Surrounding areas of North Yorkshire form an important leisure destination for residents of West Yorkshire, in particular the Yorkshire Dales National Park. Heavy traffic is experienced on routes to the national park and in parts of the park itself, with consequent parking and visual intrusion problems in an area of high landscape quality.

To address this, a network of Sunday bus services operates from Leeds, Bradford and Wakefield to popular parts of the National Park with times convenient for walkers and other visitors and with routes serving rail stations where possible. The possibility of using car parks in West Yorkshire as a reverse park and ride facility for these bus services is being discussed. In addition, discussions have been held with to look at the possibility of a providing a cycle carrying facility on these routes.

The Leeds-Settle-Carlisle and Leeds-Morecambe rail lines are promoted as alternatives to car for leisure travel, with connecting bus links to important visitor destinations not served by stations and guided walks organised by volunteers co-ordinated with train services.

## **DERBYSHIRE/ PEAK NATIONAL PARK**

### ***Context***

The Peak Park Transport Forum is an established partnership which includes 9 highway authorities, 5 district councils, the National Park Authority, 2 railway operators, Railtrack, 3 Passenger Transport Executives, the Countryside Agency, English Nature and Transpennine Ltd. with the 4 Regional Government Offices and the Highways Agency as observers. The Forum has developed the **South Pennines Integrated Transport Strategy (SPITS)**, which has been informed by a number of major studies that had been commissioned to help devise a co-ordinated strategy for the region.

Part of the south-west corner of West Yorkshire (part of Kirklees District) is incorporated into the Peak National Park. Kirklees and Metro have been active in the Transport Forum and developing the Transport Strategy.

### ***South Pennines Integrated Transport Strategy***

Public consultation was carried out during 1998 to assess transport problems and to gauge opinions about the proposed major elements of the strategy. There was widespread support for the Strategy; although there were concerns from particular localities and from special interest groups about particular proposals or relating to omissions from the strategy.

Taking the findings of the consultation and other relevant developments a priority framework is being developed which describes the objectives, key themes and how the objectives are to be met.

#### Vision and Objectives

The Vision is:

*“an environment which is safer and healthier, in which the overall impact of transport is reduced, whilst ensuring access by everyone to everyday facilities, based on a more sustainable economy.”*

The Objectives have been agreed as:

#### Integration

- to improve strategic public transport services within the South Pennines area and to promote easier connections between different ways of travelling;
- to make best use of and improve the Highways Agency's core road network in the South Pennines area;
- to limit traffic growth on other roads within the South Pennines;
- to link transport policies with the environment, land use planning, education, health and wealth creation;
- to influence the content of Regional Transport Strategies and Local Transport Plans;
- to maximise the use of rail for freight transport.

#### Safety

- to create a safer environment for:
  - residents and visitors to the area, with particular regard for vulnerable road users;
  - cross-Pennine travellers.

#### Economy

- to help develop in a sustainable way the economies of the South Pennines.

#### Environment

- to conserve and enhance the valued characteristics of the National Park and its environs.

#### Accessibility

- to develop accessible and affordable transport choices, with particular regard to vulnerable and non-motorised users.

## Strategy

The strategy consists of 5 main elements:

- traffic restraint (e.g. speed reduction measures and traffic calming) on all trans-Pennine routes and class A and B roads, south of the M62 and north of the A50 except the A57/A628/A616 corridor;
- similar traffic restraint measures on the minor road network in the SPITS area, to prevent diversion;
- improvement/reinstatement of rail routes across or around the SPITS area (e.g. re-opening of the Matlock-Buxton and Woodhead railways, trans-Pennine rail upgrades);
- improved/new strategic bus/coach services across, within or around the SPITS area;
- improvement to the A57/A628/A616 core trunk route across the National Park, including Mottram-Hollingworth-Tintwistle and on the Tintwistle-Stocksbridge section, with environmental mitigation measures through the Woodhead Moors Special Protection Area.

These measures will be complemented where appropriate by travel awareness measures.

Within West Yorkshire the measures will include:

- the A628 - M62 area traffic restraint;
- Trans-Pennine Rail upgrade;
- bus service enhancements into/through the National Park;
- progressing the strategic environmental assessment of the trans-Pennine routes.

## **AIR QUALITY, CLIMATE CHANGE AND NOISE**

### **AIR QUALITY**

*LTP Objective: "To improve environmental quality and reduce the impacts of transport pollution on air quality and noise"*

#### **Transport: A Major Source of Urban Air Pollution**

1. It is widely accepted that road transport is the most significant source of air pollution in urban areas in the UK. This is not surprising as the National Vehicle Fleet (NVF) currently exceeds 26 million vehicles, which collectively travels over 460 billion vehicle kilometres / year. The size and distance travelled by the NVF, continues to increase. Table 1 provides a summary of the transport contribution to total UK emissions.
2. In urban areas, the transport contribution to emissions is much higher than shown in Table 1 with 97%, 75% and 50% respectively for carbon monoxide, nitrogen dioxide and particulates. This is due to the concentration of road traffic and local congestion in urban areas.
3. Other significant sources of air pollution include power generation, industry and the domestic sector. To combat this problem, the UK government has developed national air quality frameworks and guidance for local air quality management.

Benzene	1,3 Butadiene	Carbon Monoxide	Lead	Nitrogen Oxides	Particulates	Sulphur Dioxide	Volatile Organic Compounds
66%	68%	75%	73%	47%	26%	2%	32%

*Table 1: UK Transport Contribution of Pollutant Emissions (1998) [Source: DETR Air Quality Strategy (Jan 2000)]*

#### **The National Air Quality Strategy 2000**

4. The National Air Quality Strategy (NAQS) 1997 (Part IV of The Environment Act 1995) identified initial standards and objectives to be achieved by the year 2005. A recent review, based on the latest scientific and medical research, has resulted in revised air quality objectives being published in NAQS 2000. The new air quality objectives are summarised in Table 2 and have been legally adopted as the Air Quality (England) Regulations 2000.
5. A series of technical guidance notes on Local Air Quality was produced by the DETR, to assist Local Authorities in the delivery of their Air Quality Reviews. The latest guidance was published in March 2000 and includes: Monitoring Air Quality, Estimating Emissions, Selection & Use of Dispersion Models and Pollutant Specific Guidance.
6. All the West Yorkshire Local Authorities have complied with the NAQS 2000 requirements by producing "Stage 1 and 2" Air Quality Review and Assessment Reports. The findings of these reports indicate that all Districts are likely to comply with the relevant air quality objectives for Benzene, 1,3 Butadiene, Lead, Carbon Monoxide

and Sulphur dioxide<sup>1</sup>. However, both nitrogen dioxide and particulates (PM<sub>10</sub>) have been highlighted as pollutants of concern, where relevant air quality objectives may be exceeded in some urban areas. Road transport is a major source of both these pollutants.

7. Work is currently underway on the relevant Stage 3 assessments. This involves a combination of detailed monitoring and modelling techniques to assess both existing and future nitrogen dioxide and particulate air quality. Exceedance of any air quality objective would require the setting up of an Air Quality Management Area (AQMA). DETR guidance document LAQM.G1(00) 'Framework for review and assessment of air quality' suggests that the final stage of the review and assessment process should be completed by June 2000. A further 3-month period has been allocated for appropriate consultations with interested parties, prior to the designation of an AQMA. These timescales will be difficult to meet. However, most West Yorkshire Local Authorities should complete the process before the end of the year 2000.

Pollutant	Air Quality Objective Level	Air Quality Objective Dates
BENZENE	16.25 micrograms/m <sup>3</sup> (running annual mean)	31 <sup>st</sup> Dec 2003
1,3 BUTADIENE	2.25 micrograms/m <sup>3</sup> (running annual mean)	31 <sup>st</sup> Dec 2003
CARBON MONOXIDE (CO)	11.6 milligrams/m <sup>3</sup> (running 8 hour mean)	31 <sup>st</sup> Dec 2003
LEAD (Pb)	0.5 micrograms/m <sup>3</sup> (annual mean)	31 <sup>st</sup> Dec 2004
	0.25 micrograms/m <sup>3</sup> (annual mean)	31 Dec 2008
NITROGEN DIOXIDE (NO <sub>2</sub> )	200 micrograms/m <sup>3</sup> (1 hour mean) *1	31 <sup>st</sup> Dec 2005
	40 micrograms/m <sup>3</sup> (annual mean)	31 <sup>st</sup> Dec 2005
PARTICULATES (PM <sub>10</sub> )	50 micrograms/m <sup>3</sup> (24 hour mean) *2	31 <sup>st</sup> Dec 2004
	40 micrograms/m <sup>3</sup> (annual mean)	31 <sup>st</sup> Dec 2004
SULPHUR DIOXIDE (SO <sub>2</sub> )	125 micrograms/m <sup>3</sup> (24 hour mean) *3	31 <sup>st</sup> Dec 2004
	350 micrograms/m <sup>3</sup> (hourly mean) *4	31 <sup>st</sup> Dec 2004
	266 micrograms/m <sup>3</sup> (15 minute mean) *2	31 <sup>st</sup> Dec 2005
<b>KEY</b> *1 - not to be exceeded more than 18 times/year *2 - not to be exceeded more than 35 times/year *3 - not to be exceeded more than 3 times/year *4 - not to be exceeded more than 24 times/year		

*Table 2: Summary of the National Air Quality Objectives* [Source: DETR Air Quality Strategy (Jan 2000)]

<sup>1</sup> At present, several districts are at risk of exceeding the sulphur dioxide objective. The main source of sulphur dioxide is from power generation in the Vale of York and the Trent valley. The Environment Agency state mitigation measures, including cleaner fuels and desulphurisation will ensure compliance by the relevant objective date.

8. The time scales of the LAQM process are unfortunate, as details of potential AQMAs cannot be specified for inclusion within the first full Local Transport Plan. Any AQMAs identified will therefore be reported in future Annual Progress Reports along with appropriate transport action plans. However, allowance has been made within the funding bid for these action plans. Also, expenditure under other headings, for example on updating urban traffic management and control systems, will be relevant to the action plans.

### ***The EU Auto-Oil Programme***

9. The EU Auto-Oil Programme and associated legislation has had a significant effect in raising standards in all member states in terms of improving fuel quality and tightening vehicle emission standards. In the UK, these initiatives are likely to reduce the NVF emissions of nitrogen dioxide and particulates (PM<sub>10</sub>) by around 35-40%, between the present date and the year ending 2005.

10. Despite these improvements, sophisticated dispersion modelling of transport and other emission sources indicate that some major conurbation's and areas close to heavily trafficked motorways within West Yorkshire are at risk of exceeding relevant air quality objectives. The average annual objective for nitrogen dioxide is most vulnerable. Additional transport measures appear necessary to further reduce emissions of nitrogen dioxide and particulates. (Full details of the West Yorkshire Authorities monitoring and modelling data can be found in the Annual Progress Report)

### ***Transport Initiatives to Improve Air Quality***

11. Figure 1 provides a summary of the LTP measures that should reduce vehicle emissions of NO<sub>2</sub>, PM<sub>10</sub> and help improve local air quality. All initiatives have been suffixed according to their present status and grouped into 3 major themes.

#### Traffic Demand Management Techniques

12. The traffic demand management techniques refer to priority measures that will encourage the use of Public Transport and reduce car dependency. The priority measures aim to improve the quality and speed of a commuter journey, thereby providing an efficient alternative to the car. Such measures should reduce the number of vehicles entering urban areas, leading to an overall reduction in vehicle emissions.

#### Reduce Need to Travel

13. This approach involves raising awareness of the environmental impacts generated by car use, particularly during peak periods. Careful planning of new developments and influencing travel behaviour can improve travel efficiency and reduce travel needs. Similar to demand management techniques, these measures will help reduce car dependency and aid improvements in air quality.

#### Actions to Reduce Vehicle Emissions

14. These actions refer to a variety of technological improvements / legal enforcement's that will lead to a reduction in vehicle exhaust emissions but would have little effect on travel behaviour.



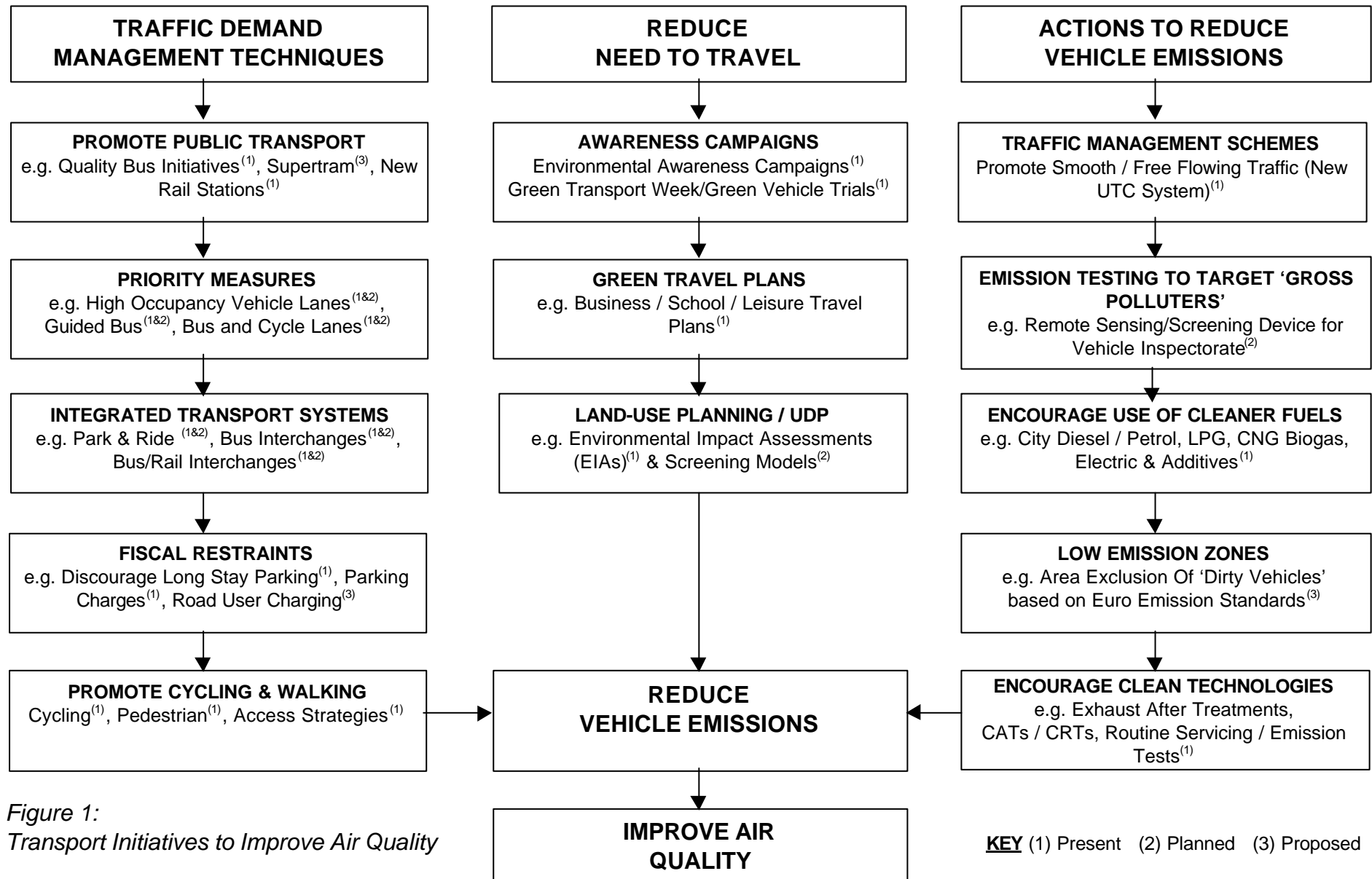


Figure 1:  
Transport Initiatives to Improve Air Quality

**KEY** (1) Present (2) Planned (3) Proposed

## CLIMATE CHANGE

*LTP Objective: "To contribute to national and international efforts to reduce the contribution of transport to overall greenhouse gas emissions."*

16. Climate Change is probably the biggest environmental challenge facing us all. The most widespread of the so-called greenhouse gases is carbon dioxide and this is produced principally from the burning of fossil fuels. These gases are building up in the upper atmosphere and are causing the average temperature of the planet to rise steadily. Although the effects of global warming are unpredictable, it is considered to be responsible for the rise in sea levels and increased frequency of extreme weather events.

17. World leaders have met to consider how we should address this threat. This has led to the UK being committed to a legally binding target to cut greenhouse gases by 12.5% below 1990 levels over the period 2008-2012. The Government is also committed to cut CO<sub>2</sub> emissions to 20% below 1990 levels by 2010 as stated in its manifesto.

18. Fossil fuel usage can be split into three sectors: residential, commercial/ industrial and transport, and in the UK these are roughly similar in size. The production of CO<sub>2</sub> in the UK, is declining slightly in the residential and commercial/ industrial sectors, but rising in the transport sector. The reason for this rising trend is attributable to increasing numbers of cars and their usage. In addition modern catalyst cars oxidise exhaust emissions into non-toxic water and carbon dioxide. This will lead to a future increase in greenhouse gas emissions.

19. All local authorities within West Yorkshire are making efforts to progress sustainable development. The essence of the Local Agenda 21 is now embedded into all strategic planning due to the imminent enactment of the Local Government Bill 1999. This Bill requires 'community strategies' to demonstrate how they contribute to local and national sustainability, regarding long term social, economic and environmental well-being.

20. Annual average CO<sub>2</sub> emission maps indicate a similar distribution to that of NO<sub>x</sub> emissions (see the Annual Progress Report). Hot spots in emissions border the major motorway network and the centres of Leeds and Bradford, with emission rates/Km<sup>2</sup> exceeding 10,000 tonnes/year.

21. CO<sub>2</sub> is a non-toxic gas and therefore has little significance regarding local air quality. However, CO<sub>2</sub> contributes towards around 65% to 70% of the potential global warming effect of the atmosphere. The annual CO<sub>2</sub> emission rate over the West Yorkshire region based on average weekday traffic flows is massive, estimated at 2.88 x 10<sup>6</sup> tonnes/year.

22. The region's air quality strategy supports the government's overall aims of improving air quality. The combined impact of the LTP measures should lead to an overall reduction in urban air pollution in future years.

23. The LTP strategy includes measures to provide high quality alternatives to the car and lorry and to manage travel demand, with a target of reducing and then eliminating traffic growth. It is intended that these actions will fulfil the LTP air quality objective.

## **NOISE**

*LTP Objective: "To improve environmental quality and reduce the impacts of transport pollution on air quality and noise"*

23. Noise is described as "unwanted sound" by the receiver. Transportation noise (road, rail and air) currently affects around 60% of the population in the UK. Road traffic noise is the most extensive source of noise pollution. The level of disturbance generated by road traffic depends on the actual noise level, its variability and the time of occurrence.

24. The best noise index for describing road traffic noise disturbance is the L10 (18 hour) dB(A). This index represents the arithmetic mean of hourly noise levels which are exceeded for 10% of the time, over an 18 hour period between 06:00 - 24:00hrs. The noise level is measured as an 'A' weighted decibel. Traffic noise levels approaching an L10 (18 hour) 68 dB(A) are likely to cause some degree of disturbance for 50% of the occupants inside a dwelling.

25. A variety of factors can influence changes in road traffic noise, these include: distance from road, type and numbers of vehicles, road surface, gradient, vehicle speed and weather conditions. The magnitude of disturbance will depend on the L10 (18 hour) dB(A) noise exposure and the sensitivity of frontage property and land-use.

### ***Mitigating Measures.***

26. The LTP strategy includes measures to provide high quality alternatives to the car and lorry and to manage travel demand, with a target of reducing and then eliminating traffic growth. It is intended that these actions will help to fulfil the LTP noise pollution objective, in association with more specific actions proposed below.

27. The Town & Country Planning (Environmental Impact Assessment)(England & Wales) Regulations 1999 ensure environmental impact assessments (EIAs) are conducted for major transportation schemes. The EIA process will aid scheme design by realignment of the carriageway away from sensitive locations, or by design of purpose built earth mounds and roadside noise barriers.

28. The EIA process, combined with the Noise Insulation (Amendments) Regulations 1988, will highlight all necessary noise insulation works, prior to construction and use of new or altered highways. The use of a low noise surfacing is becoming more prevalent, when new, or existing carriageways are shown to affect high density residential or other sensitive frontage.

29. Prospective EU legislation concerning the Future Noise Policy is likely to be proposed sometime between 2002/3. Part of this legislation will refer to "Noise Mapping" of urban areas. The intention of noise mapping is to highlight sensitive urban/suburban areas that are affected by high ambient noise levels, and help develop suitable mitigation procedures. Most of these action plans will relate to transportation, especially road traffic.

30. It is likely that the proposed legislation will require conurbation's, with a population greater than 250,000, to be noise mapped within 18 months of enforcement. It is intended that future annual progress reports will anticipate the future demands of noise mapping, and include appropriate proposals to help reduce road traffic noise and relevant locations.

## **TRANSPORT AND HEALTH**

The four West Yorkshire Health Authorities, the five West Yorkshire Local Authorities and the Passenger Transport Executive have joined together to form a West Yorkshire Transport and Health Collaborative Group. This Group has commissioned two studies looking at the linkages between transport policy and public health in West Yorkshire. These are:

- **Effectiveness and Potential of Transport Interventions in West Yorkshire**  
(prepared by the Institute for Transport Studies, University of Leeds)
- **Health Impact Assessment of Transport in West Yorkshire**

The Executive Summary of the report on the first study and the interim report on the second study are reproduced below.

It is intended that the findings of these reports will lead to a better understanding of the relationship between transport and health, guide the workings of the Group and lead to joint working on projects to improve health.

### **EFFECTIVENESS AND POTENTIAL OF TRANSPORT INTERVENTIONS IN WEST YORKSHIRE**

This report examines the effects of transport measures in terms of a number of relevant public health impacts. A wide range of transport measures were assessed against the following relevant public health impacts:

- changes in numbers of injury accidents;
- changes in levels of emissions which could lead to changes in levels of the National Air Quality Strategy pollutants;
- changes in noise and vibration;
- changes in the amounts of cycling and walking;
- changes in levels of accessibility to relevant facilities;
- changes in informal social contacts and sense of community;
- changes in levels of stress and anxiety.

The measures reviewed were in five broad categories:

- land use measures;
- infrastructure measures;
- management measures;
- information measures;
- pricing measures.

A number of assumptions had to be made about the measures and only indicative assessments were made.

The full impacts of land use measures are difficult to evaluate because many of the effects are not direct and rely on intermediate mechanisms such as changes in mode. The effects of most of the measures on the indicators are likely to be mixed.

Infrastructure measures can have beneficial effects on injury accidents. Investment in public transport, if significant enough to cause mode shift, can reduce emissions and noise/vibration. Public transport infrastructure measures, generally speaking, increase accessibility and reduce stress and anxiety, but the effects of other infrastructure measures are more mixed.

Some management measures had definite effects on injury accidents, but the effects of most measures were much more mixed, with the design of schemes to manage traffic being crucial to their effects.

Most information provision measures had little effect on injury accidents, emissions, noise/vibration and cycling and walking, except where they were pursued much more proactively than is normally the case. The provision of information could have beneficial effects on accessibility and stress and anxiety.

Pricing measures such as urban road user charging and workplace parking levies were thought to be the most effective measures in terms of reducing car use, but many of these measures have yet to be tried in this country. The effects on accessibility of these measures were much more mixed, but the effects of public transport fare and service improvements were much more generally beneficial.

The elements of the West Yorkshire Transport Strategy were reviewed, drawing upon the more general assessments. Many of these measures had beneficial aspects as far as the chosen indicators of public health were concerned, but the benefits of the major road schemes were much more mixed than many of the other measures.

While the strategy does offer improvements for all road users, there is an element of inconsistency in this approach in that the major road schemes, in offering improvements for drivers, are liable to undermine attempts to persuade drivers into using alternatives to the car.

The road user charging proposals for Leeds form an interesting new development and suggest a more radical approach to restraining the private car, in some areas and at some times. They are conditional, however, on Government funding for a range of major schemes, most notably the Supertram proposals. If road pricing goes ahead in Leeds it could be one of the most exciting developments in urban transport policy in many years and could have a significant beneficial effect on many of the public health impacts identified.

Understandably, the Local Transport Plan does not explicitly address public health issues, but was written with a wider range of objectives in mind (many of which overlap with public health concerns). There is a case for saying that there should be more explicit emphasis on the effects of measures on public health concerns, partly because we now know more about how serious some of these factors are, in particular the low levels of physical activity. For example, transport planners have tended to emphasise the traffic reduction benefits of more walking and cycling, rather than benefits of more people taking more exercise more often. A greater emphasis on the public health benefits of measures would also include consideration of the effects in terms of stress/anxiety, social contacts/sense of community and accessibility.

It is also clear that there is a requirement for a greater level of monitoring of the impact of schemes and policies so that they can be evaluated and to allow the impact of proposed schemes to be assessed. The public health effects which require more

monitoring include:

- levels of physical activity;
- respiratory conditions;
- stress and anxiety;
- social contacts and sense of community;
- accessibility.

These should be considered by road user group, especially non-car users, and by socio-economic group, because we know that inequalities in health are greater in less affluent socio-economic groups. Some of this monitoring will require the development of new techniques and approaches.

A number of alternative policies for West Yorkshire were suggested in the report including:

- a wider application of road user charging;
- workplace parking levies;
- clear zones for city and town centres where only low emission vehicles are permitted;
- more radical reallocation of road capacity to public transport, walking and cycling;
- guided bus instead of the proposed Supertram scheme in Leeds;
- a car scrappage incentive scheme to take the worst polluters off the roads;
- a more organised and comprehensive park and ride system for built up areas;
- a curtailment of the major road proposals;
- paying people to cycle.

Assessment of less developed proposals such as these is difficult, but a number of these measures were thought to have beneficial public health impacts.

Generally speaking, it was found that there was often little evidence of the impacts of transport measures in terms of the public health indicators selected. This clearly has implications for the monitoring of measures in the future, but this is a difficult area, with real life transport measures often having wide ranging (in time and space) impacts which are difficult to predict and which take place in a changing world and an evolving policy context.

## HEALTH IMPACT ASSESSMENT OF TRANSPORT IN WEST YORKSHIRE

### *Introduction*

It is now accepted that the “way we travel is making us a less healthy nation” (DETR Integrated Transport White Paper). The above seven public health impacts identified direct and indirect effects. Direct effects such as crash deaths and injuries and the impacts of vehicle-related pollution on respiratory disease are clear and significant. Indirect effects such as little physical activity, the restriction of access to services (including shops necessary for a healthy diet), fear of traffic relating to isolation, stress linking to noise and vibration levels are also significant but more difficult to measure.

The impact of transport is unequal on the general population. Children and others without the use of a vehicle are badly affected by the dominance in road planning for car use while older people and those with pre-existing disease are more at risk from the effects of motor vehicle related air pollution.

This paper attempts to quantify three of these impacts of transport on health: accidents, air pollution and physical activity. This does not imply these are the most important, only that they are measurable.

Further details of the way in which these figures have been reached are available from the West Yorkshire Transport and Health Collaborative Group.

### *Health Impact of Transport in West Yorkshire*

Overall, death rates in West Yorkshire are higher than average for England, Table 1 and 2.

<b>Deaths</b>		<b>Bradford</b>	<b>Calderdale &amp; Kirklees</b>	<b>Leeds</b>	<b>Wakefield</b>	<b>West Yorkshire</b>
All causes 1997	Male	2349	2925	3602	1620	10496
	Female	2589	3241	3787	1691	11308
	Total	4938	6166	7389	3311	21804
IHD 1996	Total	1219	1575	1740	889	5423 (24.8%)
CVD 1996	Total	569	725	710	318	2322 (10.6%)

*Table 1. Deaths from all causes and selected causes related to transport.*

Source: ONS (1999) Key population and vital statistics 1997: local and health authority areas; University of Surrey (1997) Public Health Common Data Set.

<b>Underlying cause</b>	<b>Male</b>	<b>Female</b>
All causes	106	101
Diseases of the circulatory system	106	101
Hypertensive disease	108	87
Ischaemic heart disease	109	108
Cerebrovascular disease	104	98
Diseases of the respiratory system	111	107
Chronic obstructive pulmonary disease and allied conditions	117	123
Asthma	92	75
Diabetes mellitus	97	78
Cancer of the colon	95	91
Motor vehicle traffic accidents	101	98
Motor vehicle traffic accidents with injury to pedal cyclist	78	167
Motor vehicle traffic accident with injury to pedestrian	121	171

*Table 2. Standardised mortality ratios in West Yorkshire for diseases linked to transport.*

Source: ONS mortality statistics DH1 no.30: General

### **Crashes**

The impact of crashes on health are:

- injuries and deaths;
- psychological trauma;
- restriction of activity resulting from fear of road traffic.

	<b>Pedestrians</b>		<b>Pedal cycle</b>	<b>Powered two-wheelers</b>	<b>Car users</b>	<b>Total<sup>1</sup></b>
	Children	Adult				
Deaths	8	36	7	11	37	106
Injury	970	1060	595	607	10081	14381

*Table 3. Casualties by road user type in West Yorkshire (1998)*

Source: DETR Road Accidents GB 1998: The Casualty Report (1999).

<sup>1</sup>: total includes goods vehicle, bus, coach and other vehicle users and pedestrians whose age was not reported.

Overall, death rates from road crashes are similar to national levels, see table 2, except



for pedestrian deaths. These are small number of deaths and so are likely to vary considerably from year to year.

Some studies have estimated what percentage of those injured in crashes will experience some degree of longer term psychological trauma, although the exact nature of this is unclear. It is not possible to estimate from routinely collected data what the extent of the impact of traffic is in terms of fear generated and activities foregone, let alone what this might mean for health service use.

### ***Air Pollution***

The COMEAP quantification of health effects of air pollution (DH, 1997) used here is an authoritative attempt at estimating the size of the health impact of pollutants in this country for three pollutants: sulphur dioxide, particulates and ozone. Two of these (particulates and ozone) are to a significant extent vehicle related, while sulphur dioxide is, generally, not, except for some urban areas where sulphur-containing diesel is used to a considerable extent.

Quantification of the effect of transport related air pollution on health requires a further step than those taken by COMEAP – estimating the proportion of air pollution from vehicles. It is possible to identify the total emission percentage from various sources (e.g. vehicles, stationary power plants etc), but generally this will underestimate the exposure of people to vehicle related pollutants as the ambient concentrations in areas of high population densities will be dependent on vehicles to a greater extent. Furthermore as ozone is a secondary pollutant, estimates of the production of ozone precursors have been used instead.

<b>Health outcome</b>	<b>Transport related events</b>
All cause deaths	145-255 (with ozone threshold) 246-457 (no ozone threshold)
All respiratory admissions including nitrogen dioxide	274-413 (with ozone threshold) 361-587 (no ozone threshold)
excluding nitrogen dioxide	119-258 (with ozone threshold) 206-432 (with no ozone threshold)

*Table 4. Health outcomes attributable to transport related air pollution*

The authors of the COMEAP report excluded the contribution of nitrogen dioxide from their final quantifications on the grounds that it is uncertain whether this is an independent effect or due to other pollutants. If this were the case this would lead to double counting of some respiratory admissions.

This estimates the short-term impact of transport related air pollution, not long-term. The COMEAP report estimates that in addition there is a one-year loss in life expectancy per lifelong exposure to 25ug/m<sup>3</sup> PM<sub>10</sub>. This is close to the annual average in much of West Yorkshire, and vehicles are responsible for around 23% of emissions.

Hospital admissions are a small part of the health impact and

*“For every hospital admission for lower respiratory disease there are about 60 cases who consult their GP but are not admitted. Many more episodes of asthma and other lower respiratory problems such as bronchitis do not lead to a consultation at all. Admissions therefore represent the tip of a pyramid of severity.”*

The Photochemical Oxidant Review Group.

### **Physical activity**

Walking and cycling are suitable ways of getting an appropriate level of physical activity. They can be sufficiently vigorous, are easily incorporated into daily routines, can be cheap or free and are appropriate for most people, including older people who are at greatest risk of developing diseases such as coronary heart disease. Estimates of the potential health impact of active transport depends on estimates of the impact of physical inactivity and estimates of the potential of walking or cycling to change these. As there is no local data, national information is used, Table 5.

	Inner London		Mining and industrial		Urban		Mature		Prosperous		Rural	
	M	F	M	F	M	F	M	F	M	F	M	F
Physical activity level	M	F	M	F	M	F	M	F	M	F	M	F
Low	46	44	36	42	36	42	31	42	31	41	31	39
Medium	22	32	26	33	26	33	30	33	29	34	28	36
High	32	23	38	25	38	25	39	25	40	25	40	24

*Table 5. Percentage of males and females undertaking different levels of physical activity, by Health Authority area type.*

Source: (1999) Health Survey for England: Cardiovascular disease 1998

NB Health authorities in West Yorkshire all fall into the Mining and Industrial or Urban groups, where the percentages of people falling into the low category are higher than in other types, apart from Inner London.

From the Health Survey for England the contribution of physical inactivity to the occurrence of coronary heart disease is about 46%, i.e. nearly half of all deaths from CHD. This compares the rate of death at levels of physical activity seen now with theoretical rates if all the population were active to the recommended level of at least 30 minutes of brisk walking five times a week. This is about 2,500 deaths annually in West Yorkshire. Physical activity includes more than cycling and walking; the latter contributes to about 21% for men and 23% for women of total physical activity levels. It is not known how much physical inactivity contributes to a range of conditions such as obesity, diabetes, musculoskeletal problems or mental ill health.

So physical inactivity in West Yorkshire has a significant health impact on coronary heart disease. There is a considerable amount of evidence available that the activity levels possible through using one's legs as a form of transport through cycling or walking as part of daily life are capable of delivering health benefits. However levels of cycling and walking have been declining so reversing this trend is crucial to ensuring that transport promotes health rather than continues to damage it.

### ***Social Impacts of Transport***

This is difficult to measure directly, but the 1999 Annual Health Report for Calderdale and Kirklees (Calderdale and Kirklees Health Authority, 1999) identifies “accessible public transport” indicators. These are:

- mode of transport to work in rush hour;
- percentage of GPs, dentists, pharmacists, health clinics, local food shops and post offices within 500 metres of public transport routes with one service every 30 minutes.

In Kirklees, 98% of post offices were sited within 500m of bus routes, except in South Huddersfield where this drops to 84%. The mean distance there is 230m, compared to 50m in the less rural rest of Kirklees.

### ***Actions that can be taken to address Transport Related Health Impacts***

Hamer (1999) identified a number of steps that could be taken to integrate local transport and health policy making, and this document can be seen as forming one part of this process. This document provides evidence for the need to address danger, physically active transport (walking and cycling), air pollution and access to promote the health of local populations.

As part of this process, health services and professionals should examine their own contribution to traffic. The NHS is the largest employer in Britain. Overall, health service related transport accounts for about 5% of all traffic, and a much greater percentage in the vicinity of large hospitals. The contribution of health service related traffic is thus considerable in absolute terms, as well as being significant as an example. The NHS should tackle its transport needs as seen in the recent National Service Framework for coronary heart disease. This sets, as an organisational and health promotion milestone for all health and local authorities, Primary Care Groups/Trusts and NHS Trusts, the development of “green” transport plans by April 2002 (DH, 2000).

“Green” transport plans within the NHS are becoming more common. Ensuring sites are accessible from public transport, which is in turn accessible for those with mobility problems, will be a key element to this. The importance of an active lifestyle for health discussed above gives greater emphasis for the promotion of cycling and walking as part of health related green transport plans. To ensure maximum effectiveness, development of travel plans across health and local authority areas should be co-ordinated so that issues such as travel between sites, provision of information and cost-effectiveness of low or zero emission vehicles can be ensured.

### ***Conclusions.***

The measurable health impacts of transport are substantial in West Yorkshire:

- around 100 deaths and 14,000 injuries per year from crashes;
- between 119 and 432 new or brought-forward respiratory admissions and between 145 and 457 deaths brought forward by air pollution from vehicles annually in West Yorkshire;
- about one year loss of life expectancy per lifelong exposure to particulate air pollution at levels similar to those in West Yorkshire;
- about 60 people for each admission for lower respiratory disease may consult their

GP and an unknown number increase their self-medication;

- the theoretical loss of life from coronary heart disease resulting from lack of physical activity is about 2,500 deaths per year. Walking and cycling form a significant part of current levels of activity, and there is potential to increase this. It should be noted that this quantification does not include the benefits of increasing physical activity in other areas, such as diabetes, hypertension or overweight.

Given the above impact of physical inactivity, which is a considerable underestimate, it is clear that physical activity is a major health issue that should be promoted. This does not include other public health impacts that cannot as yet be quantified.

Action to address these transport related health impacts requires co-ordinated efforts in many spheres. It is important for health professionals to engage in this in a number of ways. Firstly, by addressing the promotion of physical activity as part of population and individual programmes. Secondly, by engaging and supporting other professionals working directly on transport policy locally and regionally. Thirdly, by addressing health related transport to ensure that it promotes health and can be used as an example of good practice.

**TABLE 1: WEST YORKSHIRE LOCAL TRANSPORT PLAN - REVISED CAPITAL PROGRAMME SUMMARY 2001/02-2005/06**

Strategy	Objectives											Scheme Type	Programme						
	Primary						Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure Safety, Security & Health	Social Inclusion	Improve Environment	Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	2001/02	2002/03	2003/04	2004/05	2005/06	
<b>Public Transport</b>	✓	✓		✓	✓	✓	✓	✓		✓	Bus Priority Measures	24,024	23,829	3,849	5,750	5,124	4,086	5,020	
	✓	✓		✓	✓	✓		✓		✓	Bus Park & Ride	2,820	2,820	700	120	0	500	1,500	
	✓	✓		✓	✓	✓		✓		✓	Information	8,058	7,948	1,788	1,500	1,320	1,600	1,740	
	✓	✓		✓	✓	✓				✓	Ticketing	5,800	1,600	200	800	600	0	0	
				✓	✓							Safety & Security	2,900	1,450	200	250	300	350	350
	✓	✓		✓	✓	✓	✓	✓	✓		✓	Bus Quality Partnerships	8,150	8,150	1,200	1,300	1,500	1,950	2,200
	✓	✓		✓	✓	✓		✓	✓		✓	Bus Passenger Facilities	14,918	9,481	2,471	1,525	1,870	2,145	1,470
	✓	✓		✓	✓	✓		✓	✓		✓	Rail Passenger Facilities	12,025	7,525	1,500	1,475	1,800	1,450	1,300
	✓	✓		✓	✓	✓			✓		✓	Interchange	2,181	1,940	600	170	350	400	420
												Public Transport Total	80,876	64,743	12,508	12,890	12,864	12,481	14,000
<b>Cycling</b>	✓			✓	✓	✓		✓			National Cycle Network	5,420	5,320	891	1,028	1,510	1,211	680	
	✓			✓	✓	✓		✓			Local Cycle Routes	5,462	5,332	997	1,130	1,125	1,190	890	
	✓			✓		✓		✓			Other Cycling Facilities inc parking	985	985	190	225	190	190	190	
												Cycling Total	11,867	11,637	2,078	2,383	2,825	2,591	1,760
<b>Walking</b>	✓			✓	✓	✓		✓			Walking Strategy Measures	6,937	6,937	2,007	1,065	1,550	1,250	1,065	
<b>Motorcycling</b>				✓	✓			✓			Motorcycling	325	325	115	120	25	30	35	
<b>Highway and Traffic Management</b>				✓	✓						Area Traffic Calming	10,659	10,659	1,194	1,895	2,015	2,630	2,925	
				✓	✓						Home Zones	2,020	2,020	120	350	400	550	600	
	✓	✓		✓	✓	✓	✓	✓		✓	City/Town Centre Schemes	8,835	7,275	1,425	1,100	1,200	1,550	2,000	
	✓	✓			✓	✓					UTMC	3,000	3,000	750	900	450	450	450	
	✓	✓			✓						Traffic Management	1,694	1,584	335	427	290	267	265	
				✓	✓						Air Quality Improvements	2,835	2,835	435	580	615	615	590	

**TABLE 1: WEST YORKSHIRE LOCAL TRANSPORT PLAN - REVISED CAPITAL PROGRAMME SUMMARY 2001/02-2005/06**

Strategy	Objectives											Scheme Type	Programme						
	Primary						Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure Safety, Security & Health	Social Inclusion	Improve Environment	Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	2001/02	2002/03	2003/04	2004/05	2005/06	
	✓	✓		✓	✓			✓		✓	Airport Surface Access	230	230	0	230	0	0	0	
	✓	✓			✓						Highway Network Improvements	5,005	5,005	10	450	895	1,950	1,700	
	✓	✓		✓	✓	✓	✓	✓		✓	Major Schemes	580,620	490,789	31,582	37,078	92,948	119,736	99,445	
Highway Safety				✓	✓						Local Safety Schemes	21,053	21,053	3,986	4,135	4,230	4,315	4,387	
				✓	✓						Speed Management	1,245	1,245	245	250	300	200	250	
				✓	✓						Other Safety Schemes	600	600	100	110	120	130	140	
Demand Management				✓	✓	✓			✓		Safer Routes/Schools Initiatives	7,138	7,138	1,393	1,357	1,707	1,572	1,109	
	✓	✓			✓						Parking Schemes	495	495	170	100	100	75	50	
		✓			✓						Travel Plans (Kirklees)	185	185	35	36	37	38	39	
Social Inclusion				✓	✓						Access to Public Transport Facilities	8,356	4,530	2,023	1,748	1,100	1,048	1,086	
				✓	✓						Accessible Routes	5,292	5,287	873	1,093	1,388	990	943	
Highway Maintenance	✓	✓	✓	✓	✓						Carriageways	107,946	107,946	20,743	21,157	21,581	22,012	22,453	
	✓	✓	✓	✓	✓						Structures	81,830	81,830	15,727	16,050	16,362	16,683	17,008	
	✓	✓	✓	✓	✓						Lighting Columns	30,000	30,000	6,000	6,000	6,000	6,000	6,000	
Programme Summary												Minor Transport Schemes	160,225	138,205	25,816	27,084	27,881	28,417	29,007
												Local Safety Schemes	21,053	21,053	3,986	4,135	4,230	4,315	4,387
												Lighting Columns	30,000	30,000	6,000	6,000	6,000	6,000	6,000
												Highway Maintenance	189,776	189,776	36,470	37,207	37,943	38,695	39,461
												Major Schemes	580,620	490,789	31,582	37,078	92,948	119,736	99,445
											<b>Total</b>	<b>981,674</b>	<b>869,823</b>	<b>103,854</b>	<b>111,504</b>	<b>169,002</b>	<b>197,163</b>	<b>178,300</b>	

**TABLE 1: WEST YORKSHIRE LOCAL TRANSPORT PLAN - REVISED CAPITAL PROGRAMME SUMMARY 2001/02-2005/06**

Strategy	Objectives											Scheme Type	Programme						
	Primary						Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure Safety, Security & Health	Social Inclusion	Improve Environment	Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	2001/02	2002/03	2003/04	2004/05	2005/06	
	<b>Non Core Trunk Road Schemes</b> details are given in Table 8												<b>4,970</b>	<b>4,790</b>	940	1,050	2,000	400	400

**TABLE 2 : CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme															
	Primary					Subsidiary						£000's															
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06									
<b>Public Transport</b>	✓	✓		✓	✓	✓		✓	✓		✓	<b>Integrated Bus Promotion Schemes:</b> <b>Keighley Area Bus Priority Measures</b> - will reduce delays to buses entering and leaving Keighley Town Centre and will complement Keighley Bus Station Redevelopment <b>A641 Huddersfield Road</b> - introduction of bus priority measures will complement Manchester Road Quality Bus <b>Bradford-Halifax Corridor</b> - introduction of bus priority measures, bus stop improvements and pedestrian and cycling measures on A6036 Halifax Road, A647 Great Horton Road and Little Horton Lane <b>Shipley Gateway Corridor Schemes</b> - involving a range of measures on the A6038 Otley Road and the A657 Leeds Road aimed at reducing delays for buses, improving accessibility of bus stops and providing improved facilities for pedestrians and cyclists <b>A647/B6381 Bradford to Leeds Corridor</b> - improved transport links between Bradford and Leeds including integrated measures to improve the environment, public transport and pedestrian safety and the introduction of cycling facilities. Proposals will be developed in conjunction with SRB partnership. <b>B6144 Toller Lane Corridor</b> - introduction of bus priority measures, bus stop improvements and pedestrian and cycling measures	<b>1,250</b>	<b>1,250</b>	50	300	300	300	300								
												<b>450</b>	<b>450</b>		350	100											
												<b>750</b>	<b>750</b>				300	450									
												<b>1,875</b>	<b>1,875</b>		275	500	650	450									
												<b>925</b>	<b>925</b>	25	450	450											
												<b>450</b>	<b>450</b>	350	100												





**TABLE 2 : CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme											
	Primary					Subsidiary						£000's											
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06					
												<b>Walking Schemes Total</b>					<b>1,875</b>	<b>1,875</b>	<b>275</b>	<b>325</b>	<b>375</b>	<b>425</b>	<b>475</b>
<b>Motorcycling</b>				✓	✓				✓			<b>Motorcycle parking facilities</b>					<b>125</b>	<b>125</b>	<b>15</b>	<b>20</b>	<b>25</b>	<b>30</b>	<b>35</b>
<b>Highway and Traffic Management</b>				✓		✓						<b>Area Traffic Calming</b> - including 20 mph Zones and traffic calming in villages					<b>1,900</b>	<b>1,900</b>	200	350	450	450	450
				✓		✓						<b>Home Zones</b> - pedestrian priority areas to be developed in conjunction with local communities					<b>1,000</b>	<b>1,000</b>	100	150	200	250	300
		✓										<b>Traffic Management</b> - Bus Lane Enforcement Cameras					<b>250</b>	<b>250</b>	50	50	50	50	50
	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Traffic and Environmental Improvements:</b>											
												<b>Bradford City Centre</b> - traffic management and environmental measures to remove unnecessary traffic whilst retaining good public transport and servicing access. Pedestrians and cyclists will continue to be given a high priority.					<b>2,500</b>	<b>2,500</b>	400	400	450	600	650
												<b>Bingley Town Centre</b> - environmental improvements in town centre to maximise benefits of Bingley Relief Road including better access to public transport, pedestrian priority and cycling facilities (contributions from Bradford Council Capital Receipts are shown in Table below)					<b>1,350</b>	<b>700</b>				350	350
												<b>Ilkley Town Centre</b> - traffic management and safety improvements aimed at pedestrian priority and accessibility					<b>650</b>	<b>650</b>	250	200	200		

**TABLE 2 : CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme						
	Primary					Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>350</b>	<b>350</b>	250	100			
												<b>200</b>	<b>200</b>					200
	✓	✓				✓	✓					<b>1,000</b>	<b>1,000</b>	200	200	200	200	200
						✓	✓					<b>900</b>	<b>900</b>	150	150	200	200	200
												<b>10,100</b>	<b>9,450</b>	1,600	1,600	1,750	2,100	2,400
	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓							
												<b>17,500</b>	<b>2,500</b>	800	800	800	100	

**Major Schemes** (contributions are shown in Table 8):

**Bradford City Centre Integrated Transport Scheme** - will facilitate implementation of Broadway Centre retail and office development through removal of extraneous traffic, road closures to achieve site assembly and associated measures to achieve revised traffic movements and provide priority for public transport, pedestrians and cyclists.

**TABLE 2 : CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme						
	Primary					Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>6,800</b>	<b>3,135</b>	2,859	276			
												<b>19,594</b>	<b>14,012</b>	1,991	2,921	3,405	5,532	163
<b>Highway</b>				✓		✓						<b>5,000</b>	<b>5,000</b>	1,000	1,000	1,000	1,000	1,000
<b>Safety</b>				✓		✓						<b>795</b>	<b>795</b>	95	100	150	200	250
												<b>5,795</b>	<b>5,795</b>	<b>1,095</b>	<b>1,100</b>	<b>1,150</b>	<b>1,200</b>	<b>1,250</b>
<b>Demand Management</b>				✓	✓	✓			✓	✓		<b>1,500</b>	<b>1,500</b>	150	250	350	350	400
	✓	✓				✓						<b>475</b>	<b>475</b>	150	100	100	75	50

**TABLE 2 : CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme							
	Primary					Subsidiary						£000's							
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
												<b>Demand Management Total</b>	<b>1,975</b>	<b>1,975</b>	<b>300</b>	<b>350</b>	<b>450</b>	<b>425</b>	<b>450</b>
<b>Social Inclusion</b>				✓	✓							<b>Access to public Transport Facilities - North East Bradford Quality Bus Initiative</b> - completion of scheme which provides high level of access through bus stop works in conjunction with low floor vehicles	<b>1,200</b>	<b>300</b>	300				
				✓	✓							<b>Accessible Pedestrian Routes</b> - a programme of local measures to improve access for pedestrians and particularly for people with a mobility impairment - including dropped kerbs, tactile surfaces, removal of obstructions	<b>1,300</b>	<b>1,300</b>	150	200	300	300	350
												<b>Social Inclusion Total</b>	<b>2,500</b>	<b>1,600</b>	<b>450</b>	<b>200</b>	<b>300</b>	<b>300</b>	<b>350</b>
<b>Highway Maintenance</b>	✓	✓	✓	✓		✓						<b>Carriageways</b> (programme details are given below)	<b>18,890</b>	<b>18,890</b>	3,630	3,702	3,777	3,852	3,929
	✓	✓	✓	✓		✓						<b>Highway Structures</b> (programme details are given below)	<b>17,788</b>	<b>17,788</b>	3,345	3,377	3,494	3,625	3,947
	✓	✓	✓	✓		✓						<b>Street Lighting</b>	<b>5,400</b>	<b>5,400</b>	1,080	1,080	1,080	1,080	1,080
<b>Programme Summary</b>												<b>Minor Transport Schemes</b>	<b>26,190</b>	<b>24,640</b>	3,855	4,670	4,970	5,385	5,760
												<b>Local Safety Schemes</b>	<b>5,000</b>	<b>5,000</b>	1,000	1,000	1,000	1,000	1,000
												<b>Street Lighting</b>	<b>5,400</b>	<b>5,400</b>	1,080	1,080	1,080	1,080	1,080
												<b>Highway Maintenance</b>	<b>36,678</b>	<b>36,678</b>	6,975	7,079	7,271	7,477	7,876
												<b>Major Schemes</b>	<b>43,894</b>	<b>19,647</b>	5,650	3,997	4,205	5,632	163
												<b>Total</b>	<b>117,162</b>	<b>91,365</b>	18,560	17,826	18,526	20,574	15,879
												<b>Non Core Trunk Road Schemes</b> (see Table 8 for details)	<b>1,750</b>	<b>1,650</b>	150	350	350	400	400



**TABLE 3 : CALDERDALE METROPOLITAN BOROUGH COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 -2005/06**

Strategy	Objectives										Scheme Details	Programme £000's							
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy								
												<b>King Cross district centre improvements</b> - traffic magement to assist bus movements at this busy local interchange of bus routes.	<b>365</b>	<b>365</b>			25	150	190
												<b>District wide bus priority measures</b>	<b>400</b>	<b>400</b>					400
												<b>Public Transport Total</b>	<b>2,073</b>	<b>2,073</b>	<b>279</b>	<b>410</b>	<b>418</b>	<b>276</b>	<b>690</b>
<b>Cycling</b>	✓			✓	✓	✓	✓		✓			<b>National Cycle Network (Route 66)</b> - being developed in partnership with Sustrans. The route from Friendly to Cooper Bridge will link the Calder Valley Cycleway to the Spen valley Greenway in Bradford and Kirklees: - Calder Valley Cycleway (Friendly to Rochdale boundary) - Friendly to Cooper Bridge	<b>80</b>	<b>80</b>	40	40			
												<b>Other Cycle Network Development:</b> - Hebble Trail Cycleway (provides a safe and convenient link between Route 66 and Halifax Town Centre) - Ovenden Cycleway - Triangle to Sowerby Bridge	<b>951</b>	<b>951</b>	222	253	200	276	
												<b>Other Cycle Network Enhancements</b>	<b>175</b>	<b>175</b>		75	100		
													<b>75</b>	<b>75</b>			75		
													<b>75</b>	<b>75</b>		75			
													<b>35</b>	<b>35</b>		35			
												<b>Cycling Total</b>	<b>1,391</b>	<b>1,391</b>	<b>262</b>	<b>478</b>	<b>375</b>	<b>276</b>	<b>0</b>
<b>Walking</b>	✓			✓	✓	✓	✓		✓			<b>Halifax town centre</b> - enhancement of Southgate pedestrianisation and adjacent streets	<b>700</b>	<b>700</b>	700				
												<b>Walking Total</b>	<b>700</b>	<b>700</b>	<b>700</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Highway and Traffic Management</b>	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Traffic Management:</b> <b>Halifax town centre</b> - 'Zones & Loops' system to remove unnecessary through journeys, whilst improving bus penetration and maintaining access for essential deliveries	<b>195</b>	<b>195</b>	20	87	75	13	

**TABLE 3 : CALDERDALE METROPOLITAN BOROUGH COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 -2005/06**

Strategy	Objectives										Scheme Details	Programme £000's							
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy								
						✓	✓					<b>Air Quality</b> - Package of traffic management measures to address known and predicted poor air quality problems	<b>270</b>	<b>270</b>	30	70	100	50	20
												<b>Network Improvements:</b> Church Street Improvement	<b>1,550</b>	<b>1,550</b>			50	800	700
												<b>Highway &amp; Traffic Management Total</b>	<b>2,015</b>	<b>2,015</b>	<b>50</b>	<b>157</b>	<b>225</b>	<b>863</b>	<b>720</b>
<b>Highway Safety</b>				✓		✓						<b>Local Safety Schemes</b> - cost effective casualty reduction programme	<b>2,631</b>	<b>2,631</b>	445	524	522	555	585
												<b>Highway Safety Total</b>	<b>2,631</b>	<b>2,631</b>	<b>445</b>	<b>524</b>	<b>522</b>	<b>555</b>	<b>585</b>
<b>Demand Management</b>				✓	✓	✓			✓		✓	<b>Safer Routes to Schools</b> - programme of measures at a range of schools, providing safer walking and cycling routes and travel by public transport, to encourage alternatives to the car and to improve safety	<b>285</b>	<b>285</b>	57	57	57	57	57
												<b>Demand Management Total</b>	<b>285</b>	<b>285</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>	<b>57</b>
<b>Social Inclusion</b>				✓	✓							<b>Access to Public Transport Facilities:</b> <b>Dudwell Lane - Dryclough Lane</b> junction improvement to aid passenger access to the redeveloped hospital	<b>111</b>	<b>30</b>	30				
				✓	✓							<b>General accessibility improvements</b>	<b>245</b>	<b>245</b>	48	78	35	43	41
				✓	✓							<b>Accessible Pedestrian Routes:</b> <b>Halifax town centre</b> - reduced traffic circulation and improved facilities for pedestrians	<b>613</b>	<b>613</b>	13	120	437	43	
												<b>Sowerby Bridge SRB</b> improvements to pedestrian routes and facilities in the town centre	<b>45</b>	<b>40</b>	40				



**TABLE 3 : CALDERDALE METROPOLITAN BOROUGH COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 -2005/06**

Strategy	Objectives										Scheme Details	Programme £000's								
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06		
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy									
												<b>Cousin Lane/Nursery Lane</b> - bus accessibility measures providing better pedestrian access to bus stops and onto buses	50	50	50					
												<b>A629 Huddersfield Road corridor</b> - bus accessibility measures providing better pedestrian access to bus stops and onto buses	90	90		90				
												<b>Bradford Road/Bonegate, Brighouse</b> - traffic signals to improve pedestrian movements around the junction	50	50	50					
												General accessibility improvements	784	784	160	183	151	147	143	
												<b>Social Inclusion Total</b>	<b>1,988</b>	<b>1,902</b>	<b>391</b>	<b>471</b>	<b>623</b>	<b>233</b>	<b>184</b>	
<b>Highway</b>	✓	✓	✓	✓		✓						<b>Carriageways</b> (programme details are given below)	<b>13,495</b>	<b>13,495</b>	2,593	2,645	2,698	2,752	2,807	
<b>Maintenance</b>	✓	✓	✓	✓		✓						<b>Highway Structures</b> (programme details are given below)	<b>11,580</b>	<b>11,580</b>	2,264	2,285	2,322	2,381	2,328	
	✓	✓	✓	✓		✓						<b>Street Lighting</b>	<b>3,400</b>	<b>3,400</b>	680	680	680	680	680	
<b>Programme Summary</b>												<b>Minor Transport Schemes</b>	<b>8,452</b>	<b>8,366</b>	1,739	1,573	1,698	1,705	1,651	
												<b>Local Safety Schemes</b>	<b>2,631</b>	<b>2,631</b>	445	524	522	555	585	
												<b>Street Lighting</b>	<b>3,400</b>	<b>3,400</b>	680	680	680	680	680	
												<b>Highway Maintenance</b>	<b>25,075</b>	<b>25,075</b>	4,857	4,930	5,020	5,133	5,135	
												<b>Total</b>	<b>39,558</b>	<b>39,472</b>	7,721	7,707	7,920	8,073	8,051	
												<b>Non Core Trunk Road Schemes</b> (see Table 8 for details)	<b>1,790</b>	<b>1,790</b>	70	70	1,650	0	0	

**TABLE 4 : KIRKLEES METROPOLITAN COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme £000's												
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy													
Public Transport	✓	✓		✓	✓	✓	✓	✓	✓		✓	<p><b>Integrated Bus Promotion Schemes:</b></p> <p><b>A638 Dewsbury to Bradford Bus Priority</b> - a variety of bus priority measures along the corridor together with measures to assist cyclists and pedestrians and improve accessibility.</p> <p><b>Central Huddersfield Bus Priority and Accessibility</b> - measures in two areas of the town to improve bus access and reduce through traffic</p> <p><b>A641 Bradford Road, Huddersfield</b> - extensive bus priority measures linking with proposals in Brighouse and the guided bus measures in south Bradford, pedestrian and cycle improvements. Part combined with carriageway reconstruction scheme.</p> <p><b>A62 Manchester Road (Quality Corridor)</b> - main elements are measures to allow buses to overcome congestion at the Longroyd Bridge junction combined with pedestrian facilities and safety measures. Combined with a large carriageway reconstruction scheme</p> <p><b>A640 New Hey Road</b> - extending the partnership initiative between Rawthorpe and Lindley with Bus priority and access improvements between the Infirmary and the Town Centre. Combined with a carriageway reconstruction scheme.</p> <p><b>A629 Halifax Road, Huddersfield</b> bus priority and pedestrian access</p>	380	380	380									
												980	875	50	75	200	400	150						
												450	450		450									
												280	280			100	180							
												250	250				250							
												250	250					250						

**TABLE 4 : KIRKLEES METROPOLITAN COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme £000's								
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06		
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy									
	✓	✓		✓	✓		✓	✓	✓			<b>Junction and other improvements to assist bus movements:</b>								
												<b>Gomersal Hill Top Junction Improvement</b> - signals to improve bus reliability and assist pedestrians	100	100	100					
												<b>Bradley Mills Rd Public Transport Link</b> - link between the Rawthorpe residential area and Leeds Road (industrial and retail) to allow bus movements that are currently not possible	300	300			300			
												<b>A644 Huddersfield Road/Thornhill Link Road</b>	70	70		70				
												<b>A644 Huddersfield Road, Mirfield</b> - Traffic management and junction improvements to assist public transport	350	350				50	300	
												<b>A62 Cooper Bridge Bus Lane</b>	200	200						200
												<b>Birchcliffe Hill Rd/East Street Junction</b>	80	80						80
												<b>Other Bus Measures</b>	500	500	100	100	100	100	100	100
												<b>Public Transport Total</b>	<b>4,190</b>	<b>4,085</b>	<b>630</b>	<b>695</b>	<b>700</b>	<b>980</b>	<b>1,080</b>	
<b>Cycling</b>	✓			✓	✓	✓	✓	✓	✓			<b>National Cycle Network</b> - largely off road cycle tracks being developed in partnership with Sustrans and BWB								
												- Cooper Bridge-Ravensthorpe	335	335	300	35				
												- Cleckheaton to Low Moor	270	270		250	20			
												- Colne Valley	250	250			200	50		
												<b>Kirkburton-Waterloo Cycle Track</b> - largely off highway track to take cyclists away from the fast and busy Penistone Road	250	250				100	150	
												<b>Cycle Network Enhancements</b> - mainly on highway improvements including cycle lanes, advanced stop lines and other measures to assist cyclists	500	500	100	100	100	100	100	
												<b>Cycle Parking Facilities</b> - in town centres and at rail stations	50	50	10	10	10	10	10	
												<b>Cycling Schemes Total</b>	<b>1,655</b>	<b>1,655</b>	<b>410</b>	<b>395</b>	<b>330</b>	<b>260</b>	<b>260</b>	

**TABLE 4 : KIRKLEES METROPOLITAN COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme £000's								
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06		
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy									
Walking	✓			✓	✓	✓	✓		✓			<b>Huddersfield Ring Road Pedestrian and Cycle Accessibility</b> - crossing facilities on the north and eastern sides of the Ring Road, combined with accident reduction measures	800	800		0	400	200	200	
												<b>Central Huddersfield Pedestrianisation</b> - Byram Street	300	300		100	200			
												<b>Neighbourhood paths</b> - improved pedestrian links between local communities	550	500	100	100	100	100	100	
												<b>Walking Schemes Total</b>	<b>1,650</b>	<b>1,600</b>	<b>100</b>	<b>200</b>	<b>700</b>	<b>300</b>	<b>300</b>	
Highway and Traffic Management	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Initiatives in small town centres</b> - a variety of measures to improve conditions for all road users in the smaller towns	1,000	1,000	200	200	200	200	200	
												<b>Dewsbury Town Centre Traffic Management</b> - measures to control through traffic, improve facilities for pedestrians and assist bus movements	250	250	50	200				
												<b>Heckmondwike Town Centre Traffic Management and Bus Priority</b> Measures to minimise through traffic impact and promote alternative modes	1,000	1,000				400	600	
				✓	✓				✓			<b>Taxi Rank Improvements</b>	10	10	10					
	✓	✓				✓	✓					<b>UTC</b>	500	500	100	100	100	100	100	
						✓	✓					<b>Air Quality</b> - Package of traffic management measures to address known and predicted poor air quality problems	500	500	100	100	100	100	100	
										✓	<b>Studies/ Preliminary Design</b>	75	75	15	15	15	15	15		
												<b>Highway &amp; Traffic Management Total</b>	<b>3,335</b>	<b>3,335</b>	<b>475</b>	<b>615</b>	<b>415</b>	<b>815</b>	<b>1,015</b>	
Highway Safety				✓		✓						<b>Local Safety Schemes</b> - casualty reduction programme including speed management	4,175	4,175	800	825	850	850	850	
				✓		✓						<b>Support Measures</b> - enhancements to casualty reduction schemes to improve the environment, assist pedestrians and cyclists	600	600	100	110	120	130	140	
												<b>Highway Safety Total</b>	<b>4,775</b>	<b>4,775</b>	<b>900</b>	<b>935</b>	<b>970</b>	<b>980</b>	<b>990</b>	

**TABLE 4 : KIRKLEES METROPOLITAN COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme £000's							
	Primary					Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy								
Demand Management				✓	✓	✓			✓		✓	<b>Schools Initiatives</b> - A programme of measures at a range of schools, providing safer walking and cycling routes and travel by public transport, to discourage use of the car and to improve safety	1,750	1,750	300	325	350	375	400
	✓	✓				✓						<b>Travel Plans</b> - support measures for business travel plans	210	185	35	36	37	38	39
		✓				✓						<b>Parking</b> - Dewsbury Town Centre Parking Management	20	20	20				
												<b>Demand Management Total</b>	<b>1,980</b>	<b>1,955</b>	<b>355</b>	<b>361</b>	<b>387</b>	<b>413</b>	<b>439</b>
Social Inclusion				✓	✓							<b>Access to Public Transport Facilities :</b> <b>Huddersfield bus and rail stations interchange and accessibility improvements</b> - improved pedestrian links between the stations, to the rest of the town centre and to the local Colleges	335	190	190				
												<b>A640/ A642 Rawthorpe to Lindley Corridor accessibility improvements</b> - access to bus facilities to extend the A629 Quality Partnership on cross town routes	380	240	240				
				✓	✓							<b>A642/ A629 Waterloo</b> <b>Dewsbury bus- rail station links</b> - improved pedestrian links and accessibility <b>A62 Leeds Road</b>	35 200 80	35 200 80	35 50 80		150		
												<b>Accessible Pedestrian Routes</b> - a programme of local measures to improve access for pedestrians and particularly for people with a mobility impairment - including dropped kerbs, tactile surfaces, removal of obstructions	1,095	1,000	200	200	200	200	200
												<b>Social Inclusion Total</b>	<b>2,125</b>	<b>1,745</b>	<b>715</b>	<b>430</b>	<b>200</b>	<b>200</b>	<b>200</b>

**TABLE 4 : KIRKLEES METROPOLITAN COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives											Scheme Details	Programme £000's								
	Primary						Subsidiary						Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06		
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy										
Highway Maintenance	✓	✓	✓	✓		✓						<b>Carriageways</b> (programme details are given below)	<b>30,224</b>	<b>30,224</b>	5,808	5,924	6,042	6,163	6,287		
	✓	✓	✓	✓		✓						<b>Highway Structures</b> (programme details are given below)	<b>17,886</b>	<b>17,886</b>	3,398	3,405	3,521	3,642	3,920		
	✓	✓	✓	✓		✓						<b>Street Lighting</b>	<b>5,600</b>	<b>5,600</b>	1,120	1,120	1,120	1,120	1,120		
Programme Summary												<b>Minor Transport Schemes</b>	<b>15,535</b>	<b>14,975</b>	2,785	2,806	2,852	3,098	3,434		
												<b>Local Safety Schemes</b>	<b>4,175</b>	<b>4,175</b>	800	825	850	850	850		
												<b>Street Lighting</b>	<b>17,886</b>	<b>17,886</b>	3,398	3,405	3,521	3,642	3,920		
												<b>Highway Maintenance</b>	<b>48,110</b>	<b>48,110</b>	9,206	9,329	9,563	9,805	10,207		
												<b>Total</b>	<b>85,706</b>	<b>85,146</b>	16,189	16,365	16,786	17,395	18,411		

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme									
	Primary					Subsidiary						£ 000's									
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06			
<b>Public Transport</b>	✓	✓		✓	✓	✓	✓	✓	✓		✓	<p><b>Integrated Bus Promotion Corridor Schemes:</b></p> <p><b>Burley Road Bus Priority</b> - Bus priority measures on important bus route to the west of the city which, although an unclassified route, suffers serious congestion</p> <p><b>Roundhay Road/Easterly Road Bus Priority</b> - Priority measures on bus route serving north east Leeds, complementing other improvements at Oakwood Clock and at Roundhay Road junctions</p> <p><b>Dewsbury Road Quality Bus</b> - Major priority and infrastructure improvements to facilitate better bus services in important south Leeds corridor which also serves the White Rose Shopping Centre and Heavy Woollen Area</p> <p><b>Leeds-Bradford Corridor Quality Bus</b> - co-ordinated infrastructure and priority measures on key corridor, linking to priority measures in Bradford District</p> <p><b>East Leeds QBI Supporting Works</b> - works at junctions in east Leeds to complement the quality bus major scheme which is now under construction</p> <p><b>Hunslet Road Corridor</b> - Priority and infrastructure measures to complement existing measures in Leeds and on A61 corridor between Leeds and Wakefield, and investment in new buses by operators</p> <p><b>A61 North Guided Busway Phase 4</b> - Section of outbound bus priority on King Lane to reduce delays and better serve the</p>	<b>1080</b>	<b>1080</b>	200	880					
												<b>1230</b>	<b>1230</b>		130	850	250	0			
												<b>2375</b>	<b>2340</b>	40	200	1100	1000				
												<b>2100</b>	<b>2100</b>				300	1800			
												<b>590</b>	<b>400</b>	400							
												<b>800</b>	<b>800</b>		200	600					
												<b>500</b>	<b>50</b>	50							

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme							
	Primary					Subsidiary						£ 000's							
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
	✓	✓		✓	✓	✓	✓	✓	✓		✓								
												existing park and ride site							
	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>City Centre Bus Measures:</b>	<b>350</b>	<b>350</b>	350				
												<b>Leeds Station Bus Access</b> - Traffic management measures to allow better bus access to Leeds rail station							
												<b>Public Transport Box Enhancement</b> - improvements to The Headrow section of the box to reduce delays to buses by guided buses using the Scott Hall Road corridor	<b>1500</b>	<b>1500</b>	600	900			
	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Local Bus Priority Schemes:</b>	<b>795</b>	<b>675</b>	545	100	30		
												<b>Other Bus Measures</b> - local bus priority measures to reduce delays at points of known congestion and support quality bus improvements planned in Leeds							
	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Bus Park and Ride:</b>	<b>850</b>	<b>820</b>	700	120			
												<b>A61 North</b> - New park and ride site on A61 Harrogate Road near to Alwoodley Gates to be served by buses using the Scott Hall Road corridor guideway							
												<b>Other Bus Park and Ride</b> - Development of park and ride schemes in support of quality bus improvements planned in Leeds	<b>2000</b>	<b>2000</b>			500	1500	
												<b>Public Transport Total</b>	<b>14170</b>	<b>13695</b>	<b>2885</b>	<b>2530</b>	<b>2580</b>	<b>2050</b>	<b>3300</b>
<b>Cycling</b>	✓			✓	✓	✓	✓		✓			<b>Colton to Rothwell Cycle Link</b> - New cycle link in the south east of Leeds crossing the River Aire, providing access to development sites and linking other existing routes, including the National Cycle Network	<b>350</b>	<b>350</b>			100	250	



**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme							
	Primary					Subsidiary						£ 000's							
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
												<b>400</b>	<b>380</b>	250	130				
												<b>184</b>	<b>84</b>	84					
												<b>1900</b>	<b>1900</b>		100	600	600	600	
												<b>1792</b>	<b>1682</b>	452	480	500	250		
												<b>Cycling Total</b>	<b>4626</b>	<b>4396</b>	<b>786</b>	<b>710</b>	<b>1200</b>	<b>1100</b>	<b>600</b>
<b>Walking</b>	✓			✓	✓	✓	✓		✓			<b>507</b>	<b>257</b>	257					
												<b>900</b>	<b>850</b>	150	150	200	200	150	
												<b>150</b>	<b>150</b>			25	125		
												<b>220</b>	<b>220</b>	80	140				

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme						
	Primary					Subsidiary						£ 000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
											busy traffic signal controlled junction, complementing the proposed scheme at the adjacent Roseville Road Junction (below)							
											<b>Roundhay Road/Roseville Road Junction Improvement</b> - Scheme to improve crossing facilities at busy traffic signal controlled junction, complementing the proposed scheme at the adjacent Bayswater Road Junction (above)	140	115	115				
											<b>Walking Total</b>	1917	1792	602	290	225	325	150
<b>Motorcycling</b>				✓	✓					✓	<b>Motorcycle Measures</b>	300	200	100	100			
<b>Highway and Traffic Management</b>				✓		✓					<b>Area Traffic Calming and 20 Mph zones</b> - traffic calming and 20 mph zones in Burley/Kirkstall, Horsforth South, Roundhay, Chapeltown/Harehills, Potternewton. Garforth, Halton, Seacroft, Belle Isle, Middleton, Beeston, Armley, Bramley West/Farsley, Moorside/Town End, Pudsey/Farnley, Otley and Morley to improve safety and enhance the residential environment	8120	7609	819	1270	1315	1955	2250
				✓		✓					<b>Home Zones</b> - co-ordinated safety and environmental improvements in residential areas developed jointly with the local community	1100	1020	20	200	200	300	300
	✓	✓		✓	✓	✓	✓	✓		✓	<b>Integrated City/Town Centre Schemes:</b> <b>City Centre Loop</b> - Completion of the City Centre Loop in the area of City Square, allowing the closure of Park Row to most traffic and the partial closure to all traffic of Boar Lane. The works allow major improvements for pedestrians, particularly access	810	100	100				

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme							
	Primary					Subsidiary						£ 000's							
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
											between the station and centre, and enhancements to City Square.								
											<b>Roundhay Road/Oakwood Clock Integrated Improvement</b> - improve the local environment and provide better facilities for pedestrians, cyclists and bus users at busy local shopping area	375	175	175					
	✓	✓				✓	✓				<b>UTMC</b>	1522	1005	350	425				
											<b>Airport Surface Access</b> - Highway improvements to support the Leeds Bradford International Airport Surface Access Strategy	230	230		230				
						✓	✓				<b>Air Quality</b> - Package of traffic management measures to address known and predicted poor air quality problems	765	715	90	150	150	150	175	
	✓	✓		✓		✓					<b>Network Improvements:</b> <b>Armley Gyrotory Improvements</b> -Measures to improve safety and operational efficiency at key Inner Ring Road junction on the fringe of the City Centre <b>Stourton to Cross Green Route</b> - Route between the A639 and Cross Green, improving access to the Aire Valley Employment Area and contributing to regeneration <b>Headingley Lane/Hyde Park Corner Junction Improvement</b> - Improvements to busy traffic signal junction on A660 which is at the heart of a local shopping and residential area	850	850		50	400	400		
												1800	1800			50	750	1000	
												805	805	10	400	395			
	✓	✓		✓	✓	✓	✓	✓		✓	<b>Major Schemes</b> (contributions are shown in Table 8): <b>East Leeds Link Road</b> - New dual-carriageway link road from the Inner Ring Road to the M1 at Junction 45, opening up access	20736	9500	4500	4500	500			

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme						
	Primary					Subsidiary						£ 000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
											to key regeneration sites in the Aire Valley Employment Area and relieving traffic from the existing A64/A63 routes							
											<b>Leeds Inner Ring Road Stage 7</b> - Final section of the ring road in the south east of the city, linking the recently completed stage 6 to the M621 and removing through traffic from the city centre with benefits for public transport	<b>35576</b>	<b>35234</b>	1168	5244	9230	9507	10085
											<b>A65 Quality Bus Initiative</b> - Extensive bus priority measures on the A65 to the west of Leeds aimed at alleviating the serious delays currently experienced by buses using this route	<b>24695</b>	<b>23451</b>		1710	6551	7634	7556
											<b>Highway and Traffic Management Total</b>	<b>97384</b>	<b>82264</b>	<b>7232</b>	<b>14179</b>	<b>18791</b>	<b>20696</b>	<b>21366</b>
<b>Highway Safety</b>				✓		✓					<b>Local Safety Schemes</b> - casualty reduction programme	<b>5950</b>	<b>5750</b>	1000	1025	1075	1100	1100
				✓		✓					<b>Enforcement</b> - cameras to facilitate more effective enforcement of speed limits and red light violations by the Police	<b>470</b>	<b>450</b>	150	150	150		
											<b>Highway Safety Total</b>	<b>6420</b>	<b>5750</b>	<b>1150</b>	<b>1175</b>	<b>1225</b>	<b>1100</b>	<b>1100</b>
<b>Demand Management</b>				✓	✓	✓			✓	✓	<b>Safer Routes to School</b> - Infrastructure measures to support school travel plans and other initiatives promoting safer and more sustainable travel to school, generally based on families of schools in specific areas	<b>2325</b>	<b>2225</b>	550	425	650	540	60
											<b>Demand Management Total</b>	<b>2325</b>	<b>2225</b>	<b>550</b>	<b>425</b>	<b>650</b>	<b>540</b>	<b>60</b>
<b>Social Inclusion</b>				✓	✓						<b>Access to Public Transport Facilities:</b> <b>Bus stop protection</b> - Measures to prevent obstruction of bus stops by parked vehicles, thus allowing easier access to buses	<b>500</b>	<b>500</b>	250	250			

**TABLE 5 : LEEDS CITY COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme						
	Primary					Subsidiary						£ 000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>300</b>	<b>150</b>	100	50			
												<b>A660 Integrated Bus Stop Access and Priority Measures</b> - Provide easier access to bus stops in corridor						
												<b>1950</b>	<b>1950</b>	200	550	550	400	250
				✓	✓							<b>1660</b>	<b>1360</b>	210	300	300	300	250
												<b>Social Inclusion Total</b>						
												<b>4410</b>	<b>3960</b>	<b>760</b>	<b>1150</b>	<b>850</b>	<b>700</b>	<b>500</b>
<b>Highway Maintenance</b>	✓	✓	✓	✓		✓						<b>28,606</b>	<b>28,606</b>	5497	5607	5719	5833	5950
	✓	✓	✓	✓		✓						<b>24,437</b>	<b>24,437</b>	4341	5090	5062	5060	4884
	✓	✓	✓	✓		✓						<b>11,100</b>	<b>11,100</b>	2220	2220	2220	2220	2220
<b>Programme Summary</b>												<b>44,595</b>	<b>40,247</b>	7,397	8,080	8,165	8,270	8,335
												<b>5,950</b>	<b>5,300</b>	1,000	1,025	1,075	1,100	1,100
												<b>11,100</b>	<b>11,100</b>	2220	2220	2220	2220	2220
												<b>53,043</b>	<b>53,043</b>	9,838	10,697	10,781	10,893	10,834
												<b>81,007</b>	<b>68,185</b>	5,668	11,454	16,281	17,141	17,641
											<b>Total</b>	<b>195,695</b>	<b>177,875</b>	26,123	33,476	38,522	39,624	40,130
												<b>1,430</b>	<b>1,350</b>	720	630	0	0	0

**TABLE 6 : CITY OF WAKEFIELD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme								
	Primary					Subsidiary						£000's								
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06	
Public Transport	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Integrated Bus Promotion Schemes:</b> <b>A638 Doncaster Road Bus Priority Measures</b> - reduce delays to buses on one of the most heavily trafficked radial routes, connecting to existing bus lanes and the Waterfront Development <b>A61 Leeds Road/Wentworth Street Bus Priority Measures</b> - reduce delays to buses on one of the most heavily trafficked radial routes <b>A642 Horbury Road/A638 Dewsbury Road Bus Priority Measures</b> - reduce delays to buses on one of the most heavily trafficked radial routes, extending existing bus priority into the City Centre <b>Other minor bus priority measures</b>	300	300		300				
													200	200						200
												<b>Public Transport Total</b>	<b>996</b>	<b>996</b>	<b>30</b>	<b>610</b>	<b>76</b>	<b>30</b>	<b>250</b>	
Cycling	✓			✓	✓	✓	✓		✓			<b>National Cycle Network</b> - route between Dewsbury and Castleford via Wakefield following the River Calder and the canal sections <b>Cycle Tracks</b> - new off-highway routes forming part of the district network <b>Cycle lanes</b> <b>Cycle Parking</b>	380	380	0	100	120	80	80	
													580	580	120	120	100	120	120	
												415	415	75	100	100	70	70		
												150	150	30	30	30	30	30		
												<b>Cycling Schemes Total</b>	<b>1,525</b>	<b>1,525</b>	<b>225</b>	<b>350</b>	<b>350</b>	<b>300</b>	<b>300</b>	

**TABLE 6 : CITY OF WAKEFIELD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives										Scheme Details	Programme							
	Primary					Subsidiary						£000's							
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
Walking	✓			✓	✓	✓	✓	✓				<b>Ossett Precinct</b> - remodelling and refurbishment of the pedestrianised area in conjunction with the provision of a new bus station	240	240	100	50	25	25	40
												<b>Town Centres</b> - develop pedestrian routes with improved footways, crossings and signing	930	930	230	200	225	175	100
												<b>Walking Schemes Total</b>	<b>1,170</b>	<b>1,170</b>	<b>330</b>	<b>250</b>	<b>250</b>	<b>200</b>	<b>140</b>
Highway and Traffic Management				✓	✓							<b>Area Traffic Calming</b> - including 20 mph Zones and traffic calming in villages	1,150	1,150	175	275	250	225	225
	✓	✓		✓	✓	✓	✓	✓		✓		<b>Integrated City/Town Centre Schemes:</b>  <b>Westgate/Marygate/Bull Ring/Wood Street, Wakefield</b> - measures to reduce through traffic and improve conditions for pedestrians, buses, cyclists and deliveries, including the provision of an alternative route in conjunction with major redevelopments, and extending the pedestrianised area.	350	350			350		
	✓	✓				✓						<b>Traffic Management</b>	1,064	1,064	250	275	150	189	200
	✓	✓				✓	✓					<b>UTC</b>	715	715	90	175	150	150	150
						✓	✓					<b>Air Quality</b> - Package of traffic management measures to address known and predicted poor air quality problems	450	450	65	110	65	115	95





**TABLE 6 : CITY OF WAKEFIELD METROPOLITAN DISTRICT COUNCIL - REVISED LTP CAPITAL PROGRAMME 2001/02 - 2005/06**

Strategy	Objectives											Scheme Details	Programme						
	Primary							Subsidiary					£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse Gases	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>Social Inclusion Total</b>	<b>610</b>	<b>610</b>	<b>190</b>	<b>200</b>	<b>50</b>	<b>40</b>	<b>130</b>
<b>Highway</b>	✓	✓	✓	✓		✓						<b>Carriageways</b> (programme details are given below)	<b>16,731</b>	<b>16,731</b>	3,215	3,279	3,345	3,412	3,480
<b>Maintenance</b>	✓	✓	✓	✓		✓						<b>Highway Structures</b> (programme details are given below)	<b>10,139</b>	<b>10,139</b>	2,379	1,893	1,963	1,975	1,929
	✓	✓	✓	✓		✓						<b>Street Lighting</b>	<b>4,500</b>	<b>4,500</b>	900	900	900	900	900
<b>Programme Summary</b>												<b>Minor Transport Schemes</b>	<b>9,758</b>	<b>9,758</b>	1,691	2,545	1,991	1,499	1,682
												<b>Local Safety Schemes</b>	<b>3,947</b>	<b>3,947</b>	741	761	783	810	852
												<b>Street Lighting</b>	<b>4,500</b>	<b>4,500</b>	900	900	900	900	900
												<b>Highway Maintenance</b>	<b>26,870</b>	<b>26,870</b>	5,594	5,172	5,308	5,387	5,409
												<b>Major Schemes</b>	<b>21,719</b>	<b>18,957</b>	264	1,627	3,462	6,963	6,641
												<b>Total</b>	<b>38,111</b>	<b>63,682</b>	9,190	11,005	12,444	15,559	15,484

**TABLE 7 : WEST YORKSHIRE PASSENGER TRANSPORT AUTHORITY - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives										Scheme Details	Programme								
	Primary					Subsidiary						£000's								
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy	Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06		
Public Transport	✓	✓		✓	✓	✓			✓		✓	<b>Information:</b> <b>Real Time Information of rail services at rail stations</b> on the Airedale, Caldervale, Harrogate and Penistone Lines <b>Real/Timetable Information of bus/rail/taxis services at rail stations</b> on the Hallam, Huddersfield, Pontefract, Wakefield, York/Selby and Transpennine Lines <b>Real Time Information of bus services</b> at bus stops on 5 bus corridors across West Yorkshire <b>Electronic Timetable Information</b> at 19 bus stations in West Yorkshire, including all PTE operated bus stations <b>On Street Information</b> - provision of high quality information	280	280	20		260			
													350	240					240	
													3000	3000	400	400	400	900	900	
													2128	2128	968	700	260	200		
	✓	✓		✓	✓	✓			✓		✓	<b>Ticketing:</b> <b>Introduction of Smartcard ticketing</b> across West Yorkshire in conjunction with bus operators and neighbouring authorities	5800	1600	200	800	600			
				✓	✓						<b>Safety &amp; Security:</b> <b>Provision of CCTV - Rail Services</b>		2900	1450	200	250	300	350	350	
	✓	✓		✓	✓	✓	✓	✓	✓	✓		<b>Bus Quality Partnerships:</b>								





**TABLE 7 : WEST YORKSHIRE PASSENGER TRANSPORT AUTHORITY - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives											Scheme Details	Programme						
	Primary						Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>TOC Partnership Schemes</b> - development and improvements of facilities at rail stations each costing less than £250k <b>Keighley Rail Station</b> - Park and Ride <b>Cross Gates/Micklefield</b> - Park and Ride	4550	2275	375	400	500	500	500
												<b>Park &amp; Ride Facilities at a further 13 rail stations</b> - each costing less than £250k	5275	4000	625	700	925	950	800
	✓	✓		✓	✓	✓			✓		✓	<b>Interchange:</b> <b>Bus/Rail Interchange Facilities</b> at 20 No Rail Stations	2181	1940	600	170	350	400	420
												<b>Public Transport Total</b>	<b>54032</b>	<b>38094</b>	<b>7959</b>	<b>7020</b>	<b>7740</b>	<b>7895</b>	<b>7480</b>
Highway and Traffic Management	✓	✓		✓	✓	✓	✓	✓	✓		✓	<b>Major Schemes</b> <b>Leeds Supertram</b> - is a vital element of the Leeds City Integrated Transport Strategy providing 3 main corridors with a high quality fully accessible public transport system which will create a significant modal shift from car to public transport	434,000	384,000	20,000	20,000	69,000	90,000	75,000
Social Inclusion				✓	✓							<b>Public Transport Facilities:</b> <b>Access Improvements</b> - various rail stations <b>Access Improvements</b> - Hebden Bridge Rail Station	625	325	65	65	65	65	65
				✓	✓							<b>Personal Safety &amp; Security:</b> <b>Bus Service Corridors</b> - various schemes (CCTV etc)	1300	1300	200	200	200	300	400

**TABLE 7 : WEST YORKSHIRE PASSENGER TRANSPORT AUTHORITY - REVISED LTP CAPITAL PROGRAMME 2001/02-2005/06**

Strategy	Objectives											Scheme Details	Programme						
	Primary						Subsidiary						£000's						
	Sustainable Economy	Operational Efficiency	Maintain Infrastructure	Safety, Security & Health	Social Inclusion	Improve Environment	Reduce Greenhouse	Traffic Growth/Levels	Alternatives to Car	Freight to Rail/Water	Integration Mode/Policy		Gross Total	Net Total	01/02	02/03	03/04	04/05	05/06
												<b>AccessBus</b>	<b>600</b>	<b>600</b>			200	200	200
												<b>Social Inclusion Total</b>	<b>2775</b>	<b>2475</b>	<b>390</b>	<b>390</b>	<b>465</b>	<b>565</b>	<b>665</b>
<b>Programme Summary</b>												<b>Minor Transport Schemes</b>	<b>56,807</b>	<b>40,569</b>	8,349	7,410	8,205	8,460	8,145
												<b>Major Schemes</b>	<b>434,000</b>	<b>384,000</b>	20,000	20,000	69,000	90,000	75,000
												<b>Total</b>	<b>490,807</b>	<b>424,569</b>	28,349	27,410	77,205	98,460	83,145

## West Yorkshire LTP - Highway Structures Programme 2002/03 - Revised Bid

		Bradford £'000	Calderdale £'000	Kirklees £'000	Leeds £'000	Wakefield £'000
	<b>Assessments</b>	41	20	50	157	20
	<b>Monitoring</b>	10	5	10	70	5
	<b>Interim Measures</b>	10	20	10	40	5
	<b>Permanent Wt Restns</b>	0	15	10	20	0
	<b>Principal Inspections</b>	62	36	50	72	54
	<b>Strengthening/Maintenance Schemes</b>					
<b>Priority</b>						
	Spend on 2001/2002 Committed Schemes	310	26	200	417	100
1	Portland Subway				105	
2	Altofts Canal Bridge					742
3	Leeds Rd Bridge			150		
4	Aynholme Bridge	5				
5	King Cross Viaduct		300			
6	Queen Square Subway				105	
7	County Bridge		210			
8	Maythorne Bridge	5				
9	Alder Street Bridge			5		
10	Waddingtons Bridge				445	
11	Kings Arms Bridge	5				
12	Royd Street Bridge			5		
13	Golden Lion Bridge		79			
14	Ivy Street Bridge				345	
15	Gooder Lane Bridge		500			
16	Leaventhorpe Bridge	5				
17	Cook Lane Bridge			5		
18	Old Snap Culvert	5				
19	R/W strengthening (kirklees)			400		
20	Lord Bridge	113				
21	Far Slippery Ford Bridge	50				
22	Holme House Bridge	110				
23	Station Rd Bridge (Thornhill)			5		
24	Silsden River Bridge	100				
25	Queens Rd Bridge (Bradford)	277				
26	Roman Ridge Bridge				175	
27	Station Rd Bridge (Bradford)	173				
28	Walkley Lane Bridge			5		
29	Moorhouse Ave Bridge					88
30	Dewsbury Rd Bridge				200	
31	Jacobs Well Parapet Strengthening	250				
32	Structural maintenance kirklees			350		
33	IRR Parapet Strengthening Phase 4				350	
34	Mathew Murray phase 2				457	
35	Pollard Street Bridge			5		
36	Brighouse Canal Bridge		15			
37	IRR R/W phase 1				10	
38	Upper Lane R/W					4
39	R/W strengthening (Bradford)	775				
40	Honorias Street Bridge			150		
41	Bridge Rd Bridge					20

## West Yorkshire LTP - Highway Structures Programme 2002/03 - Revised Bid

		Bradford £'000	Calderdale £'000	Kirklees £'000	Leeds £'000	Wakefield £'000
42	Bolling Dyke A&B		10			
43	Structural Maintenance (Bradford)	260				
44	Structural Maintenance (Leeds)				196	
45	Infill Railway Bridges		10			
46	Water Lane River Bridge		8			
47	Hippens End Bridge		100			
48	Dragons Bridge				300	
49	Brown Hill Lane Bridge			75		
50	R/W Struc Main (Bradford)	476				
51	Structural Maintenance (W'field)					160
52	Butt Lane Bridge, Hepworth			100		
53	Baghill Lane Bridge					225
54	Brearley Canal Bridge		50			
55	Overflow Bridge		10			
56	Private Structures BE4			365		
57	R/W Strengthening (Calderdale)		100			
58	Structural Maintenance (C'dale)		99			
59	Strike Lane Bridge			175		
60	leeds Bridge				401	
61	Cooper Bridge			150		
62	Regent St Phase 2				200	
63	Fall Lane Bridge			100		
64	Station Ln, Berry Brow			150		
65	Waggon Lane					200
66	Calder River Bridge			150		
67	Shears Viaduct		422			
68	Smithy Holme Bridge			100		
69	Bridge Road River				105	
70	Lovell Park Road				220	
71	Gaisby Lane Canal Bridge	75				
72	IRR R/W phase 2				200	
73	Lindley Moor Bridge			100		
74	Oxford Road Br				200	
75	Midland Bridge			100		
76	Ebor Bridge	200				
77	Saddle & Waterproof package 2				300	
78	Kirkby bridge					150
79	Park Road Bridge Painting		250			
80	Eldwick Beck Br	60				
81	R/W Strengthening (Wakefield)					120
82	Projected Failures			430		
	<b>TOTALS</b>	<b>3377</b>	<b>2285</b>	<b>3405</b>	<b>5090</b>	<b>1893</b>



## **ROAD PRICING IN LEEDS**

### **1. Introduction**

- 1.1 The provisional West Yorkshire Local Transport Plan included the proposal that Leeds become a pilot city for the introduction of road user charging, subject to detailed discussions with DETR to agree a workable scheme that meets the needs of the city and is in the best interests of the people of Leeds.
- 1.2 The provisional Plan included an Annex setting out proposals for road user charging and reporting related studies. This Annex has been produced to provide an update regarding charging proposals.

### **2. Identification of Congestion Problems**

- 2.1 In recent years, Leeds has been very successful in developing its city centre, having, for example, attracted some £250m in investment over the five years to 1997. This success is predicted to continue, with employment in Leeds expected to rise by 48,000 over the period 2000-2010, adding to the 44,000 jobs created during the 1990s. Many of the anticipated new jobs will be created within the area bounded by the Inner Ring Road. Success brings problems, however, and peak period traffic conditions in Leeds are already very congested. Many roads are operating at their capacity, with the periods over which these conditions apply continuing to lengthen as drivers adjust their travel times. Average speeds are continuing to fall. In order to cater for increasing transport demand in a sustainable manner, it will be necessary to provide a high quality, high capacity public transport system and to institute demand management measures capable of encouraging greater use of alternatives to the car.

### **3. Charging Proposals**

- 3.1 The development of charging proposals have been informed by work undertaken by MVA Consultancy - in conjunction with the University of Leeds Institute of Transport Studies, David Simmonds Consultancy and Transport and Travel Research (TTR) - on behalf of Leeds City Council and Metro.

#### Type of Charging Scheme

- 3.2 Concerns about the effectiveness of workplace parking charges as a measure to relieve congestion and issues relating to their enforcement make road user charging the preferred option in the context of the issues

and problems facing Leeds.

### Proposed Charging Scheme

- 3.3 The consultants assumed that the early road pricing schemes would not be based on the use of automatic, electronic charging. The government is carrying out trials of the technology, prior to establishing national standards, and it will be some years before a full electronic charging system can be introduced. However, this does not preclude the option of starting with a non-electronic charging mechanism and then migrating to a full electronic system once the trials have concluded.
- 3.4 Their recommended option for an early road user charging scheme is one based on an area permit, with the permit purchased daily, weekly or monthly. The permit would allow vehicles to be on roads within a central area of Leeds roughly bounded by the Inner Ring Road covering some 5 sq kms. This would be a 'paperless' system, with enforcement using video cameras and automatic character recognition to test whether the vehicle's registration number has been registered with the system. This would allow ease of purchase, either by purchase from sale points at service stations, supermarkets etc around the City or by internet and telephone call credit card type charging systems making payment easier, particularly for infrequent visitors to the city.
- 3.5 The requirement for a permit to be on roads within the area, rather than just to cross a cordon to enter the area, offers significant advantages in enforcement, since evidence of violating the order can be collected anywhere within the charged area. Special arrangements would be necessary for those resident within the area.
- 3.6 For enforcement, the registration numbers of a sample of vehicles observed within the charged area would be recorded and compared against those contained in the database. Much of the enforcement would be done using proven video and image processing technology. Manual checks would be required in the processing of the images, and some on street manual enforcement might also be necessary.
- 3.7 Restricting charging to within the Inner Ring Road allows through traffic to take a suitable diversion route to avoid the charge. However, traffic modelling has highlighted some potential problems to the east of the central area, where the ring road has not yet been completed. (Completion of the Ring Road is therefore included in the programme of works considered to be essential pre-conditions for the introduction of the charging scheme).

## System Practicality and Costs

3.8 The proposed system was examined in detail and was considered to be technically feasible. It was costed using a method established by TTR for their study for the DETR. The main input assumptions are as follows:

- up to 35 boundary crossing points, involving about 56 traffic lanes;
- up to 100,000 Permits in use on any day;
- three mobile enforcement patrols;
- permits sold through a combination of telephone and internet sales, and retail outlets;
- a system life of 10 years.

3.9 On this basis, the capital costs were calculated as follows:

	£million
Roadside and mobile equipment	1.47
Retail sales network	3.30
Central system for control, accounting administration and enforcement	2.58
Other set-up costs	1.00
<i>Total capital costs</i>	<i>8.35</i>

3.10 The operating costs have been built up including an assumption of 5 percent violation, reasonable commission for retailers and credit card companies, but excluding lifetime equipment replacement costs, and are as follows:

	£ million
Operation and maintenance of roadside equipment	0.14
Operation and maintenance of retail network	0.34
Operation and maintenance of central system	0.26
Enforcement staff	1.36
Central staff and accommodation	0.90
Cost of sales and commission	3.00
Appeal adjudication	1.00
<i>Total annual costs</i>	<i>7.00</i>

## Technology Upgrade

- 3.11 An Area Permit scheme can be seen as the first step to an electronic road user charging system. Such a system could be considerably more complex and thus more flexible in nature, allowing charges to be used more effectively in the control of traffic levels.
- 3.12 The proposed area permit scheme provides an approach which could be extended to accommodate occasional users within an electronic charging system. Under the more advanced system, occasional users could purchase a one day permit, operated through the database system and priced to be unattractive to regular users. They would initially be identified as a violator, in that they would not have a valid 'in-vehicle unit' (IVU), and a video image of their licence plate would be captured. That would then be compared with the database of permitted vehicles.
- 3.13 Thus, the adoption of a paperless area permit could be compatible with a later upgrade of the system to full electronic charging, for regular users. The basic video recording is common to both, although with electronic pricing, video images are only required for those vehicles without a valid IVU, whereas with a paperless permit scheme, they are required for a sample of all vehicles. Thus, the roadside control system would be different.

#### **4. Relationship of Charging to Problems and Objectives**

- 4.1 Potentially, use of such powers would provide the means of reducing the traffic congestion that would otherwise bring increasing environmental problems and might in itself affect the economic prospects of the city centre. Such an approach is consistent with the demand management strategy that was set out originally in the West Yorkshire Transport Package and which has been further developed through the Local Transport Plan process. The introduction of road user charging is also consistent with the draft Regional Transport Strategy (forming part of draft Regional Planning Guidance) for Yorkshire and the Humber and the Deputy Prime Minister's 10 year Transport Plan.

##### Impacts on travel demand

- 4.2 The consultants' work suggested that traffic within the city centre would be reduced by 11% as a result of the pricing measures. Enhanced public transport would lead to additional traffic reductions. These have been considered when estimating a likely annual revenue stream.

##### Effects on the City Centre Economy

- 4.3 If employment within the City Centre is to continue to grow, and

particularly higher value employment, measures to reduce dependence on the car will have to be taken. Maintaining a buoyant City Centre economy into the future requires action to cause increased use of public transport and greater efficiency in the use of commercial vehicles servicing the City Centre. If the City Centre is to continue to prosper, doing nothing is not a real option.

- 4.4 Charging could, at the margin, have some negative impact on the City's economy both in terms of job loss and numbers of shoppers and other visitors. However, unchecked congestion (i.e. doing nothing or very little) would also have adverse effects on the economy notably in terms of inward investment and relocation. Provided the revenues raised from charging were invested in improvements benefiting the city centre, particularly better public transport, the city centre could be strengthened.

#### Social Impacts

- 4.5 There would be some who benefited from a charging policy, some who lost, and many who would be unaffected. The gainers include those who currently travel by other modes, most probably public transport. It would also include those who pay the charge and who have a sufficiently high income that the time savings, as a result of less congestion, justify the direct cost of the permit. The losers are those for whom the alternatives take more time or cost more, and for whom the time benefits of continuing to travel by car are not offset by the cost of a permit.
- 4.6 The evidence from other studies is that, contrary to a common perception, road user charges *can* be progressive, rather than regressive, providing benefits to lower income groups - which include many of the public transport users. This is particularly so if the revenues are invested in improved public transport, more traffic calming and better walking and cycling facilities, as would be the case in Leeds where some 41% of households have no car.

### **5. Timetable For Design and Implementation Of Charging Proposals**

- 5.1 Leeds has been selected as the English trial site for testing Road User Charging technology. The current DETR timetable for this demonstration is for the year long trial to begin no later than 1 January 2001. This trial will provide valuable information and experience in relation to the technology for road user charging.
- 5.2 The introduction of road pricing schemes, such as the one proposed here for Leeds, requires the necessary legislative powers being approved as part of the Transport Bill currently before Parliament. The Plan recognises the procedures to be followed in developing road user

charging regimes, the start up costs and the need to implement the necessary improvements in advance of charging. The Plan therefore assumes that significant net revenue from road user charging will not occur until the end of the Plan period or early in the period of the second Local Transport Plan. This view is consistent with the expenditure and revenue projections set out in table A3 of Transport 2010.

## 6. Investment Proposals

6.1 The West Yorkshire Local Transport Plan sets out a five year investment programme. Improvements to public transport and other alternatives to the car are a fundamental element of the strategy and associated investment programme.

6.2 The West Yorkshire Local Transport Plan identifies a number of major schemes that **must be committed and substantially built** before charges are introduced. These schemes are:

- Leeds Supertram
- East Leeds Link
- Inner Ring Road Stage 7

6.3 In addition, the West Yorkshire Local Transport Plan also states that improvements to the to the Leeds Outer Ring Road should be approved, with identified funding.

6.4 The West Yorkshire Local Transport Plan also includes other investment and maintenance works that would be required in order to deliver the transport strategy in Leeds (and beyond) and achieve the objectives and targets set out in the Plan.

## 7. Consultation Arrangements

7.1 Issues of public acceptability were examined using the results of questionnaire surveys carried out in Leeds as part of previous research projects and a number of focus groups undertaken as part of the road user charging study undertaken by the MVA Consultancy. The evidence suggests that use of the revenues would play a key role in determining the attitude of both residents and the business community to the scheme. Attitudes are also affected by perceptions of the reasonableness of the policy, relative to current problems, its likely effectiveness in addressing those problems, its likely accuracy and fairness, particularly the enforcement process, and, most critically, its personal impacts. Unsurprisingly, road user charging would not, in

general, be a popular policy, but through informed discussion and an understanding of the alternatives, it can gain greater acceptability. This serves to reinforce the need to present road user charges as one element of a comprehensive policy, rather than as an isolated measure and to ensure substantial improvements to local public transport are in place before the introduction of road user charges.

- 7.2 This conclusion is re-inforced by the extensive participation and consultation that informed the development of the full Local Transport Plan. The feedback showed strong support for the overall objectives of the Local Transport Plan and for the Plan strategy. There were varying degrees of support for the strategy measures, with a small majority considering the introduction of charges to enter town or city centres to be 'unacceptable' or 'fairly unacceptable'.
- 7.3 Leeds City Council and Metro are developing a comprehensive approach to informing the general public on the issues regarding user charging before undertaking more detailed consultation on the development and implementation of a charging scheme. This work will also involve further discussions with the West Yorkshire partners and neighbouring authorities regarding the wider impacts of a charging scheme.

## **8. Estimates of Revenues**

### Revenues

- 8.1 There has been no political commitment to the potential level of charges which may be appropriate to a road pricing scheme in Leeds. However, the consultants used a series of detailed assumptions regarding tidality, time of day flow variation, traffic composition, violation rates, and the extent to which vehicles make multiple trips within the Area to estimate likely future revenues, using outputs from a traffic model. A range of tariff multiple factors was expected to apply for different vehicle types.
- 8.2 In summary, the gross daily revenues for this scenario were made up as follows:
- 35,000 vehicles per day with a Peak Period Permit;
- 60,000 vehicles per day with an Interpeak Permit; and hence
- daily revenue of £130,000
- 8.3 Evasion violations were assumed to cause a reduction in revenue of 5%, but this effect would be counter-balanced by higher rates for some

- vehicles.
- 8.4 Based on this level of charges then over a 250 working day year, this suggested gross annual revenues of £32.5million. Net of annual operating costs of £7 million (see 3.10 above) the revenue projections are £25.5 million per annum.

#### Use of Revenues

- 8.5 A programme of capital investment is envisaged, funded by borrowing on the basis of anticipated charging revenues, grants and borrowing approvals given through the Local Transport Plan, contributions from private sector partners and developer contributions. As has already been made clear, it is essential that means are found to use these various sources of funding to deliver a substantial programme of investment in transport improvements ahead of any introduction of charges. Some of the investment will take place outside of the Leeds City Council boundary, in order to help provide for the significant number of commuting and other cross boundary journeys by public transport. However all the schemes mentioned below form part of the Leeds Integrated Transport Strategy now incorporated within the West Yorkshire Local Transport Plan. The robustness and continuing relevance of this Strategy have been confirmed as transport policy has evolved and been reviewed in developing recent package and Local Transport Plan submissions. The schemes envisaged include:

- **Leeds Supertram** (£434 m), providing a high quality alternative to the car. The options for phasing are set out in the Local Transport Plan and accompanying Annex E submission;
- **Inner Ring Road Stage 7** (£36m) – improvement to the Ring Road in the south east quadrant are necessary to cater for traffic avoiding the charged area;
- **Further Quality Bus Schemes** (£25m -plus complementary funding by operators) to provide quality local public transport services, including park and ride, on all corridors into the city centre building on the success of the Scott Hall Road and East Leeds Quality Bus initiatives;
- **Additional rolling stock and accelerated provision of more local rail stations together with net revenue costs of operation** (£25m + £3m pa) to provide attractive local rail services for longer commuter journeys;
- **Faster implementation of traffic calming, cycling, and pedestrian schemes.** (£10m);



8.6 Providing a quality transport service involves revenue as well as capital expenditure. The need to provide resources to fund the additional revenue support for rail services associated with proposed rail infrastructure investment has already been noted above. Other items could include:

- revenue support for enhanced bus services serving park and ride sites (where these could not be provided commercially);
- Quality Bus corridor measures, such as maintenance and cleaning of bus shelters, passenger information (including real time information using technologies that can also assist fleet management and priority at signals), safety and security measures and service promotion.

Rail infrastructure investment has already been noted above. Other items could include:

- measures in support of Green Transport Plans to be developed by city centre employers;
- enhancements to the Leeds Urban Traffic Control system to provide more priority for public transport;
- enhanced highway maintenance standards.

## **9. Project Structures**

9.1 Price Waterhouse Coopers were commissioned in 1999 to examine a range of alternative project structures for the public and private sectors, acting together, to set up and operate a road user charging system and to use the revenues to deliver transport schemes. A number of structures are possible, depending on the extent of direct public sector funding, different PFI-type options and whether the charging system and delivery of transport projects are part of separate or joint projects. The study identified a number of key issues and risks that affected the choice between different options. The final choice would depend on detailed discussions once the framework within which we would be operating was clearer.

## **10. Leeds City Council's Decision on Road Pricing**

10.1 Leeds City Council has advised the Government that significant improvements to the city's transport system are a key prerequisite to the

introduction of road user charging. These will help to secure the city's continued prosperity and sustainable development. Three conditions must be met before road user charging is introduced in Leeds:

- Supertram, East Leeds Link and Inner Ring Road Stage 7 are committed and substantially built, and improvements to the outer ring road approved with funding identified;
- any revenues raised are truly additional;
- all proceeds from road user charging are invested in local transport.

10.2 The details of any scheme will need further consideration and discussion with DETR. There is concern about the charging yield in relation to the required package of public transport and other schemes and hypothecation for a longer period (20 years rather than 10) could be necessary.