

FIVE YEAR LOCAL TRANSPORT ACTION PLAN

PROGRAMME DEVELOPMENT

The process of scenario testing described in Part 2 has informed our strategy priorities. This section looks at how individual investment levels were determined.

Integrated Transport

The integrated transport programmes have been informed by:

- an assessment of the specific issues identified in Part 1 and the options available to deal with the issues;
- the priorities identified through the consultation processes both locally and across West Yorkshire;
- modelling of different scenarios;
- an assessment of the opportunities to implement schemes over the next 5 years;
- the need to provide a balance of schemes to meet the local targets; and
- the need to implement schemes that give the best value for money.

A pragmatic approach is necessary too, that takes into account:

- evidence of best practice from other authorities
- local assessment of relative needs and benefits;
- the need to achieve targets (this was particularly important in setting the road safety expenditure levels); and
- an evaluation of what will work best based on evidence and experience based on LTP1 interventions.

All the authorities have programmes of studies leading to scheme identification and development. These studies cover areas where there are transport related problems and also where significant land use developments are expected.

A number of the projects are holistic schemes that intend to treat most of the issues on a length of road. These give a greater benefit in a quicker timescale than a succession of smaller schemes over a number of years and lead to greater public satisfaction.

Not all the schemes have been identified at this stage. The level of detail shown in the later years of the programmes is less than for earlier years. The summary tables indicate the level of funding that is likely to be allocated to different types of schemes.

Because individual schemes often address a range of issues and deliver more than one strategy element, it is not always easy

to isolate expenditure by strategy and mode. However, using 'headline' scheme categorisations, our proposed public transport expenditure from the Integrated Transport allocation of 46% (the largest single expenditure element) exceeds the LTP norm of 30% quoted by DfT, thus illustrating how the order of our expenditure reflects the LTP2 strategy scenario chosen.

Revenue support, particularly public transport subsidies and information provision, play a significant role in providing integrated transport solutions.

Delivering accessibility

The accessibility strategy is still being developed. It is difficult to assess at this stage what the costs of implementing the strategy will be. More information should be available to develop the programmes for the final version of LTP2.

Many of the public transport, cycling and walking elements of the strategy will contribute to delivering accessibility.

Some of the highway maintenance funding will also improve accessibility, particularly footway maintenance.

Tackling congestion

The effects of the congestion strategy have been modelled using the STM. This work has been beneficial in determining

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what works best and what the effects on targets are likely to be.

Almost all of the traffic management and many of the public transport capital investments are identified for tackling congestion. To a lesser extent cycling and walking schemes also contribute to tackling congestion.

Revenue costs for the parking elements of the strategy will be met from parking charges.

Safer roads

Changes to the road environment are made through capital funding for local safety schemes, corridor improvements and safer routes to school. Accident statistics are used to identify which sites should be investigated first. 'First year rate of return' is used to identify which projects should be implemented. The capital funds allocated to safer roads are based on assessments of the work needed to achieve national and local targets.

Revenue funding provides the road safety initiatives that teach road skills, raise awareness and responsibility and influence behaviour. Road safety initiatives play an important role in casualty reduction, but the pressure on revenue funding means that these initiatives do not reach the widest audience.

In April 2004 the Government awarded the district authorities £1.6 million funding to

be spent over two years to reduce road injuries to children in disadvantaged areas. The experience gained from this work will play an important role in the development of schemes during the LTP2 period

Air quality and transport emissions

In capital investment terms the benefits for air quality improvement and greenhouse gas reduction mainly come from schemes aimed at tackling congestion.

Much of the noise reduction will come from changes in practice in road maintenance as low noise surfacing becomes more common, and is achieved at little extra cost.

Maintenance

The authorities have developed strategies for life cycle planning which create balance between different maintenance solutions.

Until the highway network condition is improved, defects will continue to arise which could potentially be a source of danger. It is essential that an appropriate budget is identified to carry out reactive repairs quickly. This needs to be done at minimum practical cost on a do-minimum strategy.

To minimise whole life cost, there is an appropriate time to intervene and maintain a street with medium cost "preventative maintenance" treatments such as surface dressing, slurry or other thin surfacing. The

district authorities are generally looking to maximise the volume of this type of work as it generates good customer satisfaction. Also, low material use means that processes tend to be environmentally friendly.

Once an asset is too badly deteriorated a more radical intervention will be required at a comparatively high cost. Historic under-funding of maintenance has resulted in many streets being in this condition. Highway condition data is used to address these on a worst first basis.

LTP2 capital funding will generally be used to carry out the larger schemes, with local revenue and capital funds providing the balance. The larger works are aimed at reducing the backlog and the preventative maintenance works ensuring that deterioration in the network is arrested. This is designed to create the best achievable outcome with the available resources. As the network condition improves, more funding will be transferred from reactive to preventative maintenance.

Maintenance schemes are identified from inspections based on nationally agreed procedures. These allow programmes to be developed to treat the worst first. However, the balance of capital funding allocated to maintenance of roads and structures has had to be based on pragmatic assessment of the relative scale of the problems.

CAPITAL FUNDING

The DfT provides local authorities with their main source of capital funding for investment in local transport. They have provided each LTP area with 'provisional planning guideline' budgets for the integrated transport and for maintenance for each year of the LTP2 period.

The planning guidelines do not cover funding for major schemes (costing more than £5m), exceptional schemes and emergency maintenance funding. Additional funds are provided for Primary Route bridge strengthening and maintenance works.

The 2006/07 funding allocations for integrated transport and for maintenance are confirmed as indicative allocations. For 2007/08 all local authorities will receive at least 75% of the 2006/07 allocations.

The development of LTP2 has considered the provisional planning guidelines provided by the DfT in December 2004 shown in Tables 3.2 and 3.3.

The Integrated Transport block was allocated to the Partnership as a whole. The Partnership agreed to initially apportion the provisional allocations between the authorities as shown in Table 3.2. This may be reviewed in light of the final DfT allocations and methodology.

Table 3.2: Integrated Transport block – apportionment of provisional planning guidelines

Local Authority	Apportionment of provisional planning guideline (£ million)					Total
	2006/07	2007/08	2008/09	2009/10	2010/11	
Bradford	4.191	4.191	4.384	4.586	4.799	22.151
Calderdale	2.260	2.260	2.366	2.478	2.595	11.960
Kirklees	3.622	3.622	3.789	3.965	4.150	19.148
Leeds	5.331	5.331	5.648	5.980	6.329	28.618
Wakefield	2.987	2.987	3.125	3.270	3.423	15.793
Metro	8.147	8.147	8.555	8.984	9.434	43.268
West Yorkshire	26.538	26.538	27.868	29.264	30.731	140.939

Table 3.3: Maintenance block – provisional planning guidelines

District Authority	Provisional planning guideline (£ million)					Total
	2006/07	2007/08	2008/09	2009/10	2010/11	
Bradford	5.187	5.290	5.555	5.832	6.124	27.988
Calderdale	3.882	3.959	4.157	4.365	4.584	20.947
Kirklees	5.868	5.985	6.284	6.599	6.929	31.665
Leeds	8.636	8.809	9.249	9.711	10.197	46.602
Wakefield	3.399	3.467	3.641	3.823	4.014	18.344
West Yorkshire	26.972	27.510	28.886	30.330	31.848	145.546

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CAPITAL 5-YEAR ACTION PLANS

The following programmes of schemes are a provisional programme. They have been prepared to show how the provisional allocations identified by the DfT could be spent. They have been developed to deal with the problems and issues identified in Part 1 and follow the strategies identified in Part 2.

These programmes will be modified for the final LTP2 when the DfT provides revised allocations later in 2005. The STM will be used, as appropriate to assist in refining the programmes.

The capital programme information has been presented in different ways. A table showing the link between the core strategy approaches from Part 2 and the scheme categories is also provided.

Links between the Shared Priorities, the strategy approaches and the schemes are summarised in two tables (3.4 and 3.5).

The relevant strategy approaches are shown against each scheme or group of schemes in each of the spending tables (see below). The spending tables do not show explicitly which targets the schemes contributes to, however it can be assumed that the scheme contributes to the targets for each of the shared priorities (strategy approaches) identified.

Public transport schemes have also been developed to meet the objectives of the bus, rail, information and ticketing strategies.

It should be noted that many schemes will deliver a wide range of the strategies and contribute to many if not all of the shared priorities.

Summary tables

These show the proposed spending over the 5-year period of LTP2 against a set of general scheme categories.

The scheme categories encompass the range of initiatives outlined in Part 2, to be implemented using LTP2 Capital funding.

A West Yorkshire wide summary (Table 3.6) is provided in this section. In addition, one table has been produced for each authority; these tables are shown in Appendix B.

These tables will be used as a basis for programme monitoring, to be reported through the APRs. This will form part of the assessment of progress on LTP2 carried out by the DfT.

Geographic tables

Figure 3.1 identifies the areas used in the geographic presentation of programmes. Information is provided split by key centres, strategic corridors, areas of concern, etc as appropriate to the local issues identified in Part 1.

Tables 3.7 to 3.27 provided scheme information by geographical area and Metro for schemes costing over £200,000. Short descriptions of these schemes are also given.

Table 3.28 summarises the packages of smaller schemes costing less than £200,000 that would be implemented across the district authority area or county. More detailed tables showing the breakdown for each year by each authority are given in Appendix B

Primary Route Network structures

Strengthening and major refurbishment of structures on the primary route network are eligible for separate funding from DfT. A draft programme for these structures is given in Appendix B.

Schemes on de-trunked roads

Capital maintenance schemes on recently de-trunked roads are eligible for separate funding from the DfT. A draft programme of schemes for these roads is given in Appendix B.

Table 3.4: Capital funded actions

Strategy Approaches – full or part Capital Funded									
Delivering Accessibility		Tackling Congestion		Safer Roads		Better Air Quality		Effective Asset Management	
A1	Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes	C1	Encourage modal switch to public transport	S1	Provide an appropriate road environment with facilities for each user group	AQ1	Alternatives to the car and traffic demand management measures	M1	Maintenance of roads and footways
		C2	Manage the demand for travel	S4	Encourage the correct behaviour of all road users	AQ2	Encouraging more sustainable travel	M2	Strengthening and maintenance of bridges, walls and other highway structures
		C3	Manage the existing highway network			AQ3	Actions to reduce vehicle emissions		
A2	Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users	C4	Improve the highway network						
A3	Minimise road weight and width restrictions	C5	Encourage more cycling and walking						
A4	Maintain and develop public transport networks through our bus and rail strategies								
A6	Raise awareness of public transport and improve information								

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Table 3.5: Link between capital scheme categories and strategy approaches

Scheme Categories	Strategy approach
Bus priority (excluding signals)	<p>A4 Maintain and develop public transport networks through our bus and rail strategies</p> <p>C1 Encourage modal switch to public transport</p> <p>C4 Improve the highway network</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>
Public Transport Interchange	<p>A4 Maintain and develop public transport networks through our bus and rail strategies</p> <p>A6 Raise awareness of public transport and improve information</p> <p>C1 Encourage modal switch to public transport</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>
Park and Ride	<p>C1 Encourage modal switch to public transport</p> <p>C2 Manage the demand for travel</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>
Bus infrastructure (excluding interchanges)	<p>A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes</p> <p>A4 Maintain and develop public transport networks through our bus and rail strategies</p> <p>C1 Encourage modal switch to public transport</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>

Scheme Categories	Strategy approach
Cycling Schemes	<p>A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes;</p> <p>A2 Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users</p> <p>C5 Encourage more cycling and walking</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>
Walking Schemes	<p>A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes;</p> <p>A2 Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users</p> <p>C5 Encourage more cycling and walking</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p>
Travel Plans	<p>C1 Encourage modal switch to public transport</p> <p>C2 Manage the demand for travel</p> <p>AQ2 Encouraging more sustainable travel</p>
Local Safety Schemes	<p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>S4 Encourage the correct behaviour of all road users</p>

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Scheme Categories	Strategy approach
Road Crossings	<p>A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes</p> <p>C5 Encourage more cycling and walking</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p>
Traffic Management and Traffic Calming	<p>A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes</p> <p>C3 Manage the existing highway network</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>AQ1 Alternatives to the car and traffic demand management measures</p> <p>AQ3 Actions to reduce vehicle emissions</p>
Local Road Schemes	<p>C4 Improve the highway network</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p>
Principal, Non-principal and unclassified roads maintenance	<p>A2 Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users</p> <p>C4 Improve the highway network</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>M1 Maintenance of roads and footways</p>

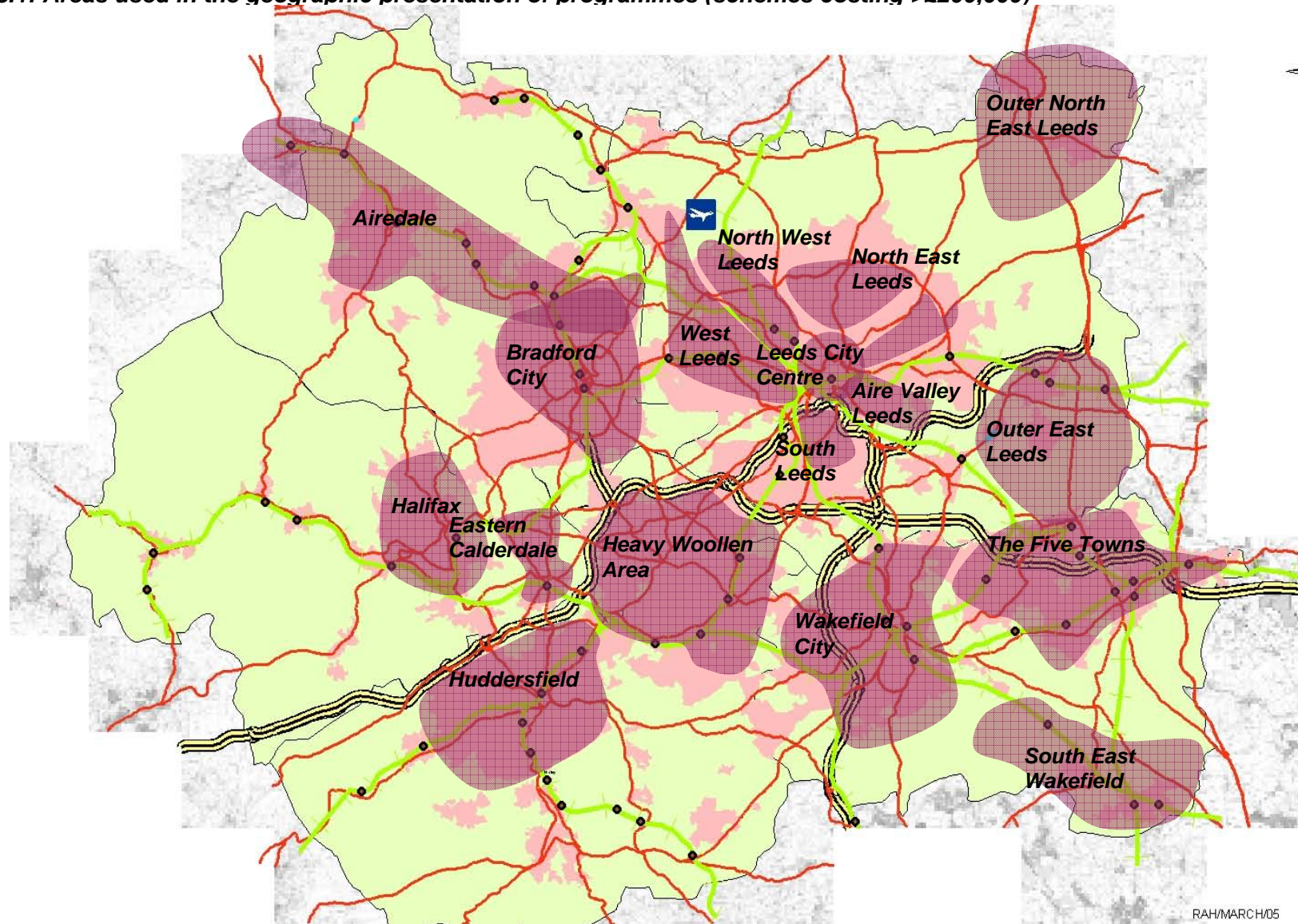
Scheme Categories	Strategy approach
Bridge and wall strengthening and maintenance	<p>A2 Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users</p> <p>A3 Minimise road weight and width restrictions</p> <p>S1 Provide an appropriate road environment with facilities for each user group</p> <p>M2 Strengthening and maintenance of bridges, walls and other highway structures</p>

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Table 3.6: Summary action plan for West Yorkshire – LTP capital expenditure

Scheme Category	Planned Expenditure (£000s)						Contribution to Shared Priorities					
	2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Delivering Accessibility	Tackling Congestion	Safer Roads	Better Air Quality	Effective Asset Management	Enhancing the Quality of Life
Bus Priority/HOV	4,335	2,745	3,701	2,424	3,093	16,298	✓	✓		✓		✓
Public Transport Interchanges	4,546	4,500	3,123	2,540	2,339	17,048	✓	✓		✓		✓
Park and ride	0	20	200	600	800	1,620	✓	✓		✓		✓
Bus infrastructure (exc. interchanges)	4,902	5,624	6,323	6,488	6,600	29,937	✓	✓		✓	✓	✓
Cycling Schemes	1,239	1,462	1,582	1,643	1,585	7,511	✓	✓	✓	✓		✓
Walking Schemes (inc. ROWs)	1,140	1,570	1,915	2,305	2,440	9,370	✓	✓	✓	✓		✓
Travel Plans	115	115	132	133	134	629	✓	✓	✓	✓		✓
Local Safety Schemes	1,956	1,656	2,178	1,802	1,665	9,257	✓		✓			✓
Safe Routes to School	1,325	1,425	1,475	1,475	1,450	7,150	✓	✓	✓	✓		✓
Road crossings	865	930	750	1,075	935	4,555	✓		✓			✓
Traffic Management and Traffic Calming	2,911	3,401	3,373	4,412	4,250	18,347	✓	✓	✓	✓	✓	✓
Local Road Schemes	940	1,040	450	1,450	2,100	5,980	✓	✓	✓	✓	✓	✓
Miscellaneous	2,264	2,050	2,666	2,915	3,341	13,236	✓	✓	✓	✓	✓	✓
Integrated Transport Total	26,538	26,538	27,868	29,262	30,732	140,938						
Roads and footways	17,921	18,244	18,842	19,438	20,427	94,872	✓	✓	✓	✓	✓	✓
Bridge and wall strengthening and maintenance	8,417	8,629	9,401	10,237	10,774	47,458	✓		✓		✓	✓
Miscellaneous	634	637	643	656	647	3,217	✓	✓	✓	✓	✓	✓
Maintenance Total	26,972	27,510	28,886	30,331	31,848	145,547						
Grand Total	53,510	54,048	56,754	59,593	62,580	286,485						

Figure 3.1: Areas used in the geographic presentation of programmes (schemes costing >£200,000)



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Table 3.7: Bradford City schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Bradford city centre traffic management Traffic & environmental improvements to complement Broadway Retail development	A1,C4,S1			275	275	310	860		
A650 Tong St bus priority Bus priority measures to complement recently completed major scheme in South Bradford	C1,AQ1	250	50				300		
Thornton Rd - Four Lane Ends bus priority Bus lane inbound, bus boarding facilities, signal retiming to reduce queuing	A1,C1,C5, AQ1				25	300	325		
National Cycle Network (NCN) Spen Valley - Bradford Complete missing links between Spen Valley greenway and Leeds- Liverpool canal cycle route	C5,AQ1	125	230	60			415		
NCN Bradford - Shipley Complete missing links between Spen Valley Greenway and Leeds- Liverpool canal cycle route	C5,AQ1		75	235			310		
A647/B6381 Bradford to Leeds corridor bus priority Giving buses priority to complement measures in Leeds programme	C1,AQ1			25	350		375		
A647 Leeds Rd/A6177 Killinghall Rd Junction Improvement Addresses congestion and give buses priority, scheme could be accelerated with additional 25% funding	C1,C3,C4, AQ1				150	350	500		
A658 Harrogate Rd/New Line junction improvement Junction Improvement, includes pedestrian and cycling facilities, improves access to Airport	C1,C4,C5, AQ1	640	640				1,280		
C111 Baldwin Lane Bridge Strengthening	A2,A3,S1, M2	100	100	100	5		305	325	

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Bradford Beck Phase 2 Culvert strengthening	A2,A3,S1, M2	40	225	225	10		500	500
Bradford Beck Phase 3 Culvert strengthening	A2,A3,S1, M2		15	150	55	5	225	225
Bradford Beck Phase 4 Culvert maintenance/ strengthening	A2,A3,S1, M2		15	150	150	150	465	465

Table 3.8: Airedale schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Shipley area bus priority measures Priority for buses at congested junctions	C1,AQ1	150	150	100			400	
Keighley area bus priority measures Priority for buses at congested junctions	C1,AQ1		100	100	100	100	400	
Airedale Hospital - Steeton/Silsden Bus, cycle and pedestrian routes to link Airedale hospital and large employment sites with Steeton/Silsden rail station	A1,C1,C5, AQ1			300	100		400	
Keighley town centre traffic management Traffic management, public transport and pedestrian facilities	A1,A4,C1, C3,C5, AQ1			150	150	200	500	
Shipley area traffic management Traffic and environmental management, pedestrian and cycling facilities	A1,A4,C1, C3,C5, AQ1			100	100	100	300	
A6037 Crossley Evans Retaining Wall strengthening	A2,A3,S1, M2	500	50				550	600
B6429 Ireland Bridge Bridge Maintenance	A2,A3,S1, M2	40	250	10			300	300

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Fell Lane / Holme House Lane Bridge Strengthening	A2,A3,S1, M2	200	300	10			510	550	
Canal Road Parapets Bridge Strengthening	A2,A3,S1, M2	20	125	125	5		275	275	

The measures required to deal with the regeneration and congestion issues for the Shipley area (identified in Part 1) are included in Major Scheme proposals that are intended to be submitted in the later years of LTP2.

Rural areas of Bradford

There are no Capital Schemes over £200k for these areas. The issues are addressed through revenue funding or smaller capital schemes.

Table 3.9: Halifax schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Halifax Town Centre Westgate - traffic management and pedestrian facilities	A1,A2,C1, C3,C5,S1, AQ1	125					125	252	
Halifax Town Centre Complementary measures to the 'zones & loops' traffic management system including enhanced pedestrian routes linking public transport and major attractors	A1,A2,A4, C1,C5, S1,AQ1	125	250				375	375	
Halifax Town Centre Church Street widening – reduce severe traffic congestion, improved pedestrian facilities at junctions including refuges	A1,A2,C4,C 5, S1,AQ1			250	750	1,000	2,000	2,000	
A644 Brighouse & Denholme Gate Road, Shelf Stone Chair Roundabout to Boundary - Reconstruction of carriageway & footways	A2,C4,S1, M1	270					270	270	

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
A629 Ovenden Road, Halifax Ovenden Way to Foundry Street North - Reconstruction of carriageway	A2,C4,S1, M1			200			200	200
A629 Keighley Road, Halifax Beechwood Road to Heathmoor Park Road - Reconstruction of carriageway	A2,C4,S1, M1			290			290	290
A672 Oldham Road, Boothwood Entrance to M62 Depot to Lancs Boundary - Reconstruction of carriageway	A2,C4,S1, M1				200		200	200
A58 Aachen Way, Halifax Queens Road to Orange Street Roundabout - Reconstruction of carriageway	A2,C4,S1, M1				440		440	440
A629 Keighley Road, Ovenden Foundry Street North to Beechwood Road - Reconstruction of carriageway	A2,C4,S1, M1				230		230	230
North Bridge Halifax Bridge Maintenance	A2, A3, S1, M2					220	220	220
Water Lane Halifax Bridge Strengthening	A2, A3, S1, M2		295				295	295

Table 3.10: Eastern Calderdale schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
A6025 Park Road, Elland Ashgrove House Apartments to House No 147 - Reconstruction of carriageway	A2,C4,S1, M1		260				260	260

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
A6025 Elland Road, Brighouse Grove Cottages to Ashgrove House Apartments - Reconstruction of carriageway	A2,C4,S1, M1					290	290	290
A641 Huddersfield Road Brighouse Bridge Strengthening	A2, A3, S1, M2			355			355	355
B6112 Stainland Road Elland Bridge Strengthening	A2, A3, S1, M2	600					600	600
Gooder Lane (Brighouse) Bridge Strengthening	A2, A3, S1, M2	350					350	350

Table 3.11: Rural Areas of Calderdale schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Hebden Bridge District Centre New signals, measures to assist buses access the centre, bus boarding facilities, traffic management, control and regulate parking, signal retiming to reduce queuing, introduction of 20 mph Zone to help cyclists and pedestrians, and facilities at junctions and refuges to assist pedestrians	A1,A2,A4, C1,C3,C5, S1,S4,AQ1	275					275	275
Todmorden District Centre Measures to assist bus access, bus boarding facilities, control and regulate parking, traffic calming to help cyclists and pedestrians, facilities at junctions and refuges to assist pedestrians	A1,A2,A4, C1,C3,C5, S1,AQ1	50	250	100			400	400
Calder Valley Cycle Route Sowerby Bridge to Cooper Bridge (NCN Route 66) – 'flagship' cycling and walking route – safe, convenient access to district centres and public transport	A1,A2,C5, AQ1	75	250	200	100		625	625

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
A6033 Rochdale Road Walsden A681 Bacup Road to Rochdale Road Industrial Estate - Reconstruction of carriageway and footways	A2,C4,S1, M1	290					290	290
A646 Halifax Road, Hebden Bridge Church Lane to Underbank Avenue - Reconstruction of carriageway	A2,C4,S1, M1	290					290	290
A646 Halifax Road, Eastwood Burnt Acres Lane to Duke Street - Reconstruction of carriageway	A2,C4,S1, M1		200				200	200
B6138 Cragg Road Mytholmroyd Bridge Strengthening	A2, A3, S1, M2				210		210	210
A58 Sowerby Street Sowerby Bridge Bridge Strengthening	A2, A3, S1, M2				325		325	325

Table 3.12: Huddersfield schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Route 503 Huddersfield to Halifax QBC (A629) Bus priority at signals, bus lanes outbound, bus boarding facilities, signal retiming, pedestrian facilities at junctions, pedestrian refuges, ASLs and lanes for cyclists (Started in 2005/06)	A1,A2,A4, C1,AQ1	169					370	370
A629 New North Road Huddersfield Reconstruction of carriageways and footways – Principal Road (Started in 2005/06)	A2,C4,S1, M1	294	6				350	350
St George's Square Huddersfield Reorganisation of central square to provide bus interchanges facilities with Huddersfield rail station (Started in 2005/06)	A1,A2,A4, C1,C5, S1,AQ1	250	265				1,150	1,150

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Route 350 Huddersfield to Marsden QBC Comprehensive corridor scheme - bus priority elements and boarding facilities (Started in 2005/06)	A1,A2,A4, C1,S1,AQ1	220	440				893	893	
A643 Lindley Moor Road Salendine Nook. Reconstruction of carriageways and footways	A2,C4,S1, M1		115	100	275	300	790	790	
B6108 Meltham Road Lockwood Reconstruction of carriageways and footways	A2,C4,S1, M1	195	5				200	200	
Dalton Green Lane Dalton Reconstruction of carriageways and footways	A2,C4,S1, M1	270					270	270	
Kingsbridge * Bridge Strengthening (Started in 2005/06)	A2,A3,S1, M2	460	245	455			1,160	1,300	
Dalton Bank Road Bridge Strengthening	A2,A3,S1, M2				250	100	350	350	
A62 Leeds Road Canal Bridge, Huddersfield Bridge Strengthening	A2,A3,S1, M2			25	175		200	200	
A616 Chapel Hill Bridge, Huddersfield Bridge major maintenance	A2,A3,S1, M2					250	250	250	

The measures required to deal with the implications of economic regeneration along A62 Leeds Road (mentioned in Part 1) are included in a Major Scheme proposal that is intended to be submitted during the LTP2 period.

Many of the congested junction issues will be addressed (some studies ongoing) via the traffic management and UTMC pots, possibly with developer contributions. Public transport improvements should also help ease some of the congestion issues.

Table 3.13: 'Heavy Woollen Area' schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Route 281 Thornhill to Fieldhead QBC Comprehensive corridor scheme - bus priority elements and boarding facilities.	A1,A4,C1, S1,AQ1	20	40	0	50	240	964	964	
Route 201/202/203 Huddersfield to Leeds QBC Comprehensive corridor scheme - bus priority and boarding facilities	A1,A4,C1, S1,AQ1	30	70	621	379	153	1,414	1,414	
Heckmondwike Town Centre Area wide traffic management and public transport facilities	A1,A2,A4, C1,C3,C5, S1,AQ1	25	85	350	400	350	1,155	2,000	
A643 Kirkgate Birstall Reconstruction of carriageways and footways	A2,C4,S1, M1	10	199	416			635	635	
A643 Westgate Cleckheaton Reconstruction of carriageways and footways	A2,C4,S1, M1				200	200	800	800	
Calder Valley Greenway Combined cycling/pedestrian/equestrian facilities (Started in 2005/06)	A1,A2,C5, AQ1	100	100	65	20		535	935	
Calder Valley Greenway Extension Combined cycling/pedestrian/equestrian facilities.	A1,A2,C5, AQ1			10	40	50	170	250	
Dewsbury to Batley UDP Route Combined cycling/pedestrian/equestrian facilities.	A1,A2,C5, AQ1			10	40	20	250	400	
Soothill Bridge – Batley * Bridge strengthening scheme (Started in 2005/06)	A2,A3,S1, M2	80	235	85			400	750	
Station Road Bridge, Thornhill * Bridge strengthening scheme	A2,A3,S1, M2				350	50	400	400	
Headfield Bridge Thornhill * Bridge strengthening scheme	A2,A3,S1, M2	100	150				250	250	

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Savile Bridge, Dewsbury * Bridge strengthening scheme	A2,A3,S1, M2			354	459	187	1,000	1,000
Ravensthorpe Bridge * Bridge strengthening scheme	A2,A3,S1, M2					200	200	200
Slaithwaite Road Bridge, Thornhill Bridge strengthening scheme	A2,A3,S1, M2					250	250	250

* If major scheme bid is successful replacement structures will include: Union Bridge Marsden, Thornhill Bridge, Shepley River Bridge, Leeds Road Railway Bridge, Kitchen Bridge Subway, Halifax Road Bridge, Whiteacre Street, Dodlee Bridge, Britannia Mills Bridge, Large Culvert strengthening – 9 Schemes

Many of the congested junction issues will be addressed (where solutions are identified – some studies ongoing) via the traffic management and UTMC pots, possibly with developer contributions. Public transport improvements should also help ease some of the congestion issues.

Table 3.14: Rural South Kirklees schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Fenay Greenway Combined cycling/pedestrian/equestrian facilities	A1,A2,C5, AQ1	60	40	80	90	120	700	1,100
Colne Valley Greenway Combined cycling/pedestrian/equestrian facilities linking Cone Valley settlements to Huddersfield Town Centre (Started in 2005/06)	A1,A2,C5, AQ1	50	30	15			250	350
Ottiswell Bridge Marsden Bridge Strengthening Scheme	A2,A3,S1, M2					400	400	400

An ongoing study is expected to identify proposals to improve accessibility in the Colne Valley and address the issues arising from traffic going to or from the M62. Many of the other rural issues are relate to inadequate public transport and hence require revenue funding.

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Table 3.15: Leeds cross sector bus infrastructure schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Route 49 Seacroft to Bramley 59 Stops. Raising kerbs at all bus stops along the route to ensure compatibility with low floor buses.	A1,A2,C1, AQ1	293					293		
Route 50 Seacroft to Horsforth 69 Stops. Raising kerbs at all bus stops along the route to ensure compatibility with low floor buses.	A1,A2,C1, AQ1	344					344		
Route 74/75 Ireland Wood to Middleton 102 Stops. Raising kerbs at all bus stops along the route to ensure compatibility with low floor buses	A1,A2,C1, AQ1	50	450				500		
Route 16 Seacroft to Farsley 80 Stops. Raising kerbs at all bus stops along the route to ensure compatibility with low floor buses.	A1,A2,C1, AQ1	40	360				400		

Table 3.16: Leeds City Centre schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)					Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11		
Dynamic Signing 20 dynamic car park signs and 12 Variable Message Signs (VMSs)	C3,AQ1	235	225				460	
Sheepscar Pedestrian Routes Package of measures for pedestrian routes in vicinity of Sheepscar Gyratory	A1,A2,C5, S1,AQ1			300			300	
Water Lane Bridge Cantilever Strengthening	A2,A3,S1, M2				500		500	500
Gipton Beck Bridge Cantilever Strengthening	A2,A3,S1, M2				250		250	250

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Leeds Bridge Strengthening	A2,A3,S1, M2				1,000	1,000	2,000	2,000

Leeds Inner Ring Road Stage 7 is a fully approved scheme. Other issues in this area are being addressed through an on-going study of the A6120 Leeds Outer Ring Road, and a Park and Ride study which has been commissioned by Metro.

Table 3.17: East Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Halton and Seacroft 20 mph (4 phases) 20mph Zones in accordance with the LPSA - 20mph Traffic Regulation Order, signing, and where necessary physical calming measures.	S1,S4		312	130	176		618	
A64 York Road Reconstruction of carriageways and footways	A2,C4,S1, M1				470	460	930	930

Table 3.18: Aire Valley Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Balm Road Railway Bridge Strengthening	A2,A3,S1, M2					300	300	300
East Park Parade Strengthening	A2,A3,S1, M2					220	220	220

The main transport issues in the area are being dealt with through a proposed major scheme and developer funding, and are part of an ongoing study.

Outer East Leeds

There are no Capital Schemes over £200k for this area. The issues are addressed through revenue funding or smaller capital schemes. Any highway schemes as part of the Millennium Village will be developer funded.

Table 3.19: Outer North East Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Linton Bridge Refurbishment	A2,A3,S1, M2	270					270	270	
Thorpe Arch Bridge refurbishment	A2,A3,S1, M2		350				350	350	

Table 3.20: North East Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Burley Road Bus Priority Outbound bus lane from Cross Westfield Road to Willow Road, UTMC improvements at the junction of Burley Road / Cardigan Road and pedestrian crossings	A4,C1,C4, C5,AQ1	2,100	350				2,450		
A61 QBC Stonegate Road Junction UTMC scheme to signalise the existing roundabout.	C1,C3,S1			100	250	650	1,000		
A61 QBC King Lane Outbound bus lane on King Lane between Stonegate Road and A6120 Outer Ring Road	A4,C1,C4, AQ1				100	650	750		
Meanwood Road Bus priority measures (feasibility study underway)	A4,C1,C4, AQ1			100	300		400		
A61 Harrogate Road Reconstruction of carriageways and footways	A2,C4,S1, M1		490	520	350	300	1,660	1,660	

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
C332 Main Street Shadwell Reconstruction of Carriageways and footways	A2,C4,S1, M1			400			400	400

The other issues identified in this area are being dealt with through an on-going study of the A6120 Leeds Outer Ring Road and a study of the Harrogate Line commissioned by Metro.

Table 3.21: North West Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Abbey Road Bus Priority Bus Priority scheme associated with A65 major scheme	A4,C1,C4, AQ1	500	500				1,000	
Horsforth 20 mph Introduction of 20mph Zones in accordance with the LPSA - 20mph Traffic Regulation Order, signing, and where necessary physical calming measures.	S1,S4		226				226	
Yeadon – Guiseley Walking and Cycle Route Improvements to a disused Railway line to create a safe route to school and utility and leisure route.	A1,A2,C5, S1,AQ1		125	125			250	
A658 Main Street - Pool Bank - Victoria Avenue - Apperley Lane Reconstruction of Carriageways and footways	A2,C4,S1, M1			630	600	350	1,580	1,580
A659 Arthington Lane Reconstruction of Carriageway	A2,C4,S1, M1	280					280	280
Oxford Road Bridge Strengthening	A2,A3,S1, M2	300					300	300
Otley Bridge Refurbishment	A2,A3,S1, M2					800	800	800

Metro are currently undertaking a study of the Harrogate Line which will examine issues relevant to this area.

Table 3.22: West Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
A647 QBC Bus priority measures along the A647 corridor, covering Armley Road, Stanningley Road and Bradford Road but excluding Stanningley by-pass	A4,C1,C4, AQ1	100	250	1,000	150		1,500		
Pudsey Bus Station New Bus Station	A1,A4,A6, C1,AQ1	150	250				400		
Armley Pedestrian Scheme Package of measures for pedestrian routes in vicinity of Armley Gyrotory	A1,A2,C5, S1,AQ1		300				300		
A65 Kirkstall Road, Commercial Road, Abbey Road, New road, New Road Side, Leeds Road Reconstruction of carriageways and footways - coordinated with Bus corridor work on Abbey Road	A2,C4,S1, M1	500	650	500	400	650	2,700	2,700	
B6154, Tong Road Reconstruction of Carriageways and footways	A2,C4,S1, M1	250	300				550	550	
Parkin Lane Bridge Strengthening	A2,A3,S1, M2			250			250	250	
Canal Road Railway Bridge Strengthening	A2,A3,S1, M2					220	220	220	
Viaduct Road Arches Refurbishment	A2,A3,S1, M2			1,000			1,000	1000	

Other issues in this area are being dealt with through an on-going study of the A6120 Leeds Outer Ring Road and through a study commissioned by Metro of the Harrogate Line.

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Table 3.23: South Leeds schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
A653 Dewsbury Road Bus Priority Measures to improve conditions for buses <ul style="list-style-type: none"> • Northbound bus lane on Ring Road Beeston Park on the approach to the Tommy Wass junction. • Change of priorities at the A653 / M621 slip road to allow buses access to the nearside bus lane. • 4 UTMC cameras • Redesign of 2 bus lay-bys north of the Wide Lane • Bus stop accessibility improvements 	A1,A4,C1, C4,AQ1		400	1600	150			2,150	
Middleton 20mph - 3 Phases (NE, NW, S) 20mph Zones in accordance with the LPSA - 20mph Traffic Regulation Order, signing, and where necessary physical calming measures.	S1,S4		60	143	174			377	
Bell Isle 20 mph – 2 Phases 20mph Zones in accordance with the LPSA - 20mph Traffic Regulation Order, signing, and where necessary physical calming measures.	S1,S4				330	200		530	
Harehills Traffic Calming Integrated scheme to address issues beyond 20mph Zones.	S1,S4					329		329	
A653 Dewsbury Road Reconstruction of carriageways - phased in with junction improvements in Dewsbury Road Bus initiative	A2,C4,S1, M1	530	520	350				1,400	1,400
A650 Wakefield Road, Bruntcliffe Road, Britannia Road, Tingley Common Reconstruction of Carriageways and footways	A2,C4,S1, M1		500	500	370			1,370	1,370
A643 Elland Road, Victoria Road, Bruntcliffe Lane Reconstruction of Carriageways and footways	A2,C4,S1, M1	410	480	360				1,250	1,250

Table 3.24: Wakefield City schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Doncaster Road, Wakefield QBC/showcase route schemes	A1,A2 A4, C1,AQ1	500	500				1,000	
Horbury Road, Wakefield Busways/bus lanes	A4,C1,AQ1	100	100				200	
Denby Dale Road, Wakefield HOV Lanes	A4,C1,C2, AQ1					500	500	
Kirkgate Bus Gate, Wakefield Rising bollards giving bus priority	A1,C1,AQ1				600		600	
Ings Road/Westgate, Wakefield Junction improvement assisting bus movements	C1,AQ1		187	313			500	
Ings Road/Denby Dale Road, Wakefield Local Safety Scheme	S1,S4			750			750	
A638 Doncaster Road, Wakefield Low Bridge Warning equipment	A2,A3,S1, M2	100	125				225	
A61 Chantry Roundabout, Wakefield Local Road Scheme	S1,S4				200	400	600	
Wakefield Sub-Urban Area Local Safety Scheme, area wide	S1,S4				200		200	
Wood Street, Wakefield Pedestrianisation	A1,A2,C5, AQ1				500	750	1,250	

The improvements proposed on the Doncaster Road will mitigate poor air quality in this corridor identified as an air quality AOC. The proposed pedestrianisation at Wood Street, Wakefield addresses access issues for pedestrians identified through 'Urban Renaissance' work.

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Table 3.25: The 'Five Towns' schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Jubilee Way, Pontefract Local Safety Scheme	S1,S4	400					400	
Airedale Estate, Castleford Local Safety Scheme, area wide	S1,S4	200					200	
Castleford Interchange Integrated Transport Scheme Covering design and development costs of the major scheme to secure major scheme funding approval for implementation (Metro Scheme). Scheme includes a new combined bus/rail interchange, pedestrianisation of a further part of Carlton St., and improved pedestrian links from the new interchange to the town centre will encourage greater use of public transport.	A1,A4,C1, AQ1	500	145				645	645

The provisionally approved Castleford Interchange improvements will help to improve public transport access to and from the South East of the District.

Table 3.26: South East Wakefield schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
South East Wakefield Local Safety Scheme, area wide	S1,S4		200				200	

The provisionally approved A1 Hemsworth Link Road will help to improve access to and from the A1 strategic route for South East Wakefield.

Table 3.27: Metro schemes costing more than £200,000

Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						
		2006/07	2007/08	2008/09	2009/10	2010/11	Net Total	Gross Total
Roadside Information Including the provision of additional timetable cases across West Yorkshire	A6	300	300				600	600
Passenger Waiting Areas – YBI Routes Continuation of bus shelter installation and replacement programme targeted at core routes on the bus networks where there is the highest potential for patronage growth	A1,A4,C1, AQ1	1,000	1,285	1,385	1,395	1,485	6,550	6,550
Passenger Waiting Areas – Outside Core Network Bus shelter installation and replacement programme at locations off the core routes as a means of addressing social inclusion issues.	A1,A4,C1, AQ1	130	247	1,044	1,079	1,025	3,525	3,525
'Smart' shelter refurbishments The assessment and refurbishment of Smart shelters in order to extend life and comply with DDA requirements	A1,A4,C1, AQ1	250	75	75	75	75	550	550
New Bus Stations (e.g. Brighouse, Pudsey) Construction of a modern bus stations to replace existing facilities	A1,A4,C1, AQ1	870	3,280	80			4,230	4,230
Bus Station Enhancements (e.g. Halifax Travel Centre, Dewsbury) Enhancements to existing bus stations including accessibility improvements	A1,A4,C1, AQ1	100	100	305	210	310	1,025	1,025

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
RTPI system development Completion of the scheme to install RTPI displays on key bus routes within West Yorkshire and continued development to improve accessibility to the information and links with other public transport and traffic information systems, ticketing systems, UTM systems and CCTV systems	A4,A6,C1, AQ1	800	1,065	1,170	200	200	3,435	3,435	
Rail Station Shelters and waiting areas Enhancement of Passenger waiting facilities on Rail platforms at stations across West Yorkshire	A4,C1,AQ1			500	300	200	1,000	1,000	
Platform Extensions Programme of platform extensions to allow additional carriages to be added to rail services to increase passenger capacity	A4,C1,AQ1		350	1,050	300	300	2,000	2,000	
Rail Station Accessibility Improvements Includes provision of Park and Ride, cycle and pedestrian access, DDA accessibility improvements and Bus / Rail interchange facilities.	A4,C1,AQ1	66	100	175	400	509	1,250	1,500	
New Rail Station (e.g. Low Moor) Provision of a new rail station including park and ride facilities	A1,A4,C1, AQ1	2,610					2,610	2,610	
Enhancement and replacement of passenger information displays Replacement and enhancement of electronic passenger information displays at various bus stations across West Yorkshire and provision of electronic infopoints at key locations	A6,C1				1,175	1,175	2,350	2,350	
Information at Rail Stations Provision of electronic passenger information displays at various rail stations across West Yorkshire	A6,C1				250	250	500	500	

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Scheme Title and Description	Relevant Strategies	Expenditure (£000s)						Net Total	Gross Total
		2006/07	2007/08	2008/09	2009/10	2010/11			
Enhancement and replacement of CCTV cameras Upgrade and replacement of cameras to be carried out with the development of digital CCTV storage system	A1,A4			720	800	480	2,000	2,000	
Park and Ride at Rail Stations Additional Park and Ride site and expansion and enhancement of existing facilities across West Yorkshire.	C1,C2,AQ1			200	600	800	1,600	1,600	
Accessbus Vehicles Renewal of 33 access bus vehicles during the LTP2 period	A1,C1	629	300	471	390	390	2,180	2,180	
Information and Communication Technology (ICT) core infrastructure upgrades Updating of Metro's ICT systems to support existing requirements- includes desktop and printer replacement programme, provision of new data collection equipment and development of call centre services.	A6	220	200	360	585	810	2,175	2,175	
Capital Salaries Funding of staff cost of employees developing and delivering capital programme schemes		350	350	350	350	350	1,750	1,750	
Capital Project development Funding the development of capital schemes within LTP 2 and the development of the 3 rd LTP		50	50	50	100	100	350	350	
Rapid Transport Development Development of Rapid Transport schemes including studies and staffing costs	A4,C1	260	260	560	760	960	2,800	2,800	

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Table 3.28: Capital schemes / groups of schemes costing less than £200k (2006/07 to 2010/11)

Category of Scheme	5 Year Expenditure (£000s)					
	Bradford	Calderdale	Kirklees	Leeds	Wakefield	Metro
INTEGRATED TRANSPORT						
Bus priority (excluding signals)	0	550	948	650	150	0
Public Transport Interchange	0	0	688	600	90	14,115
Park and Ride	0	0	0	0	20	1,600
Bus infrastructure (excluding interchanges)	2,150	2,000	1,650	2,400	435	17,510
Cycling Schemes	640	1,005	319	1,512	1,460	0
Walking Schemes	1,815	500	1,189	1,150	1,635	0
Travel Plans	0	135	0	125	345	0
Local Safety Schemes	4,500	2,475	6,482	1,700	1,275	0
Road Crossings	750	300	610	2,450	375	0
Traffic Management and Traffic Calming	5,717	511	825	1,970	1,832	0
Local Road Schemes	0	0	0	1,400	200	0
Miscellaneous	214	685	1,390	0	1,250	9,397
Integrated Transport Total	15,786	8,161	14,101	13,957	9,067	42,622
MAINTENANCE						
Principal Roads	2,908	2,050	2,249	0	3,392	0
Non Principal Roads	1,673	1,660	7,550	200	5,924	0
Unclassified Roads	10,573	2,280	8,924	18,212	5,652	0
Bridge and wall strengthening and Maintenance	9,255	4,685	4,497	9,610	2,606	0
Miscellaneous	449	4,957	1,000		770	0
Maintenance Total	24,858	15,632	24,220	28,022	18,344	0
OVERALL TOTAL	40,644	23,793	38,321	41,979	27,411	35,283

More detailed tables showing the breakdown for each year by each district authority are given in Appendix B

REVENUE FUNDING

The transport strategies include many projects and policies funded through the local authorities' revenue income and other sources. This funding is critical for the achievement of many of the LTP2 targets.

The following tables show:

- the strategy elements that are at least part funded through the revenue budgets (Table 3.29); and
- the revenue expenditure for 2005/06 which supports LTP2 strategy (Table 3.30)

The 2005/06 revenue funding is given as an example at this stage. It is anticipated that similar levels of funding will be available throughout the 5 years of LTP2.

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Table 3.29: Revenue funded or policy initiatives

Strategy Approaches – Full or part Revenue Funded				
Delivering Accessibility	Tackling Congestion	Safer Roads	Better Air Quality	Effective Asset Management
A1 Improving physical accessibility by making bus stops more accessible, improving the continuity and signage of cycle and walk routes	C1 Encourage modal switch to public transport	S1 Provide an appropriate road environment with facilities for each user group	AQ1 Alternatives to the car and traffic demand management measures	M1 Maintenance of roads and footways
	C2 Manage the demand for travel	S2 Provide the relevant skills for driving, riding, walking and cycling	AQ2 Encouraging more sustainable travel	M2 Strengthening and maintenance of bridges, walls and other highway structures
A2 Maintain and improve road, pavement and right of way conditions for pedestrians, cyclists, vehicle and freight users	C3 Manage the existing highway network	S3 Promote awareness of road safety issues and of the responsibility for others	AQ3 Actions to reduce vehicle emissions	M3 Maintenance and operation of UTMC and CCTV systems (on street and public transport)
	C5 Encourage more cycling and walking	S4 Encourage the correct behaviour of all road users		M4 Maintenance of lighting, signs and road markings
A4 Maintain and develop public transport networks through our bus and rail strategies		S5 Improve safety through new technologies that can reduce the risk injury		M5 Maintenance of bus stations, shelters and stops
A5 Maintain and enhance concessionary fare schemes				M6 Maintenance of car and lorry parks
A6 Raise awareness of public transport and improve information				M7 Maintenance of Rights of Way
				M8 Winter maintenance
				M9 Reducing accident claims and better use of resources and materials

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Table 3.30: Revenue programmes for 2005/06

Strategy Area	Relevant Strategies	Transport Related Revenue Expenditure (£000s)						
		Bradford	Calderdale	Kirklees	Leeds	Wakefield	Metro	TOTAL
Local rail services	A4,C1,AQ1						57,982	57,982
Subsidised bus services	A1,A4,AQ1						21,294	21,294
Concessionary travel	A5,AQ1						20,740	20,740
Prepaid tickets	A4,C1,AQ1						18,000	18,000
Public transport development	A1,A4,C1						21,995	21,995
Direct passenger support	A1,A4,A6						10,542	10,542
Traffic management	A1,C3,S1, AQ1, AQ3	53	379	1,013	1,822	482		3,749
UTMC	A1,C3,S1	355	63	452	922	163		1,955
Road safety	S1,S2,S3, S4,S5	207	253	222	526	377		1,585
School crossing patrols	S1,S4		240	512	485	333		1,570
Travel plans	C2,AQ2			55		189		244
Parking management	C2,M6	-223	-1,036	-2,141	-3,807	-878		-8,085
CCTV management	S1,M3		164	568		648		1,380
Other integrated transport	A1,A4			294	142			436
Private street works	M1	107						107
ROWs	A1,A2,C5, AQ1	107	329	466	194	410		1,506
Highway structures	M2	108	430	28	422	69		1,057
Surface dressing and thin surfacing	A2,C4,S1,M1		315		1,037	357		1,709
Resurfacing	A2,C4,S1,M1			652	1,749	1,035		3,436
General maintenance	A2,C4,S1,M1	2,718	2,145	3,422	6,225	3,817		18,327

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Strategy Area	Relevant Strategies	Transport Related Revenue Expenditure (£000s)						
		Bradford	Calderdale	Kirklees	Leeds	Wakefield	Metro	TOTAL
Winter maintenance	A2,S1,M8	954	885	1,734	1,320	637		5,530
Horticultural maintenance	M1	701	152	554	885	629		2,921
Gully cleansing	M1	453	271	610	713	373		2,420
Signs, guardrails and road markings	M1	158	263	376	457	89		1,343
Lighting energy	A1,S1,M4	1,237	698	950	2,329	912		6,126
Street lighting maintenance	A1,S1,M4	1,521	632	1,406	2,704	2,444		8,707
Public liability insurance	M9	2,229	1,310	2,281	3,229	852		9,901
TOTAL		10,685	7,493	13,454	21,354	12,938	150,553	216,477

IMPLEMENTATION ISSUES

Hierarchy of Consideration

In order to ensure an equitable implementation of the strategies, a hierarchy of consideration has been adopted as part of the design process for all highway schemes and will continue to be used throughout the LTP2 period.

The hierarchy is used to ensure that the needs and safety of each group or road users are sequentially considered when a scheme is being prepared, that each group of users is given proper consideration and that schemes will not make existing conditions worse for the more vulnerable transport users.

The adopted hierarchy order is

- 1 pedestrians, emergency services and people with disabilities
- 2 cyclists and horse riders
- 3 public transport users
- 4 taxis and motorcyclists
- 5 deliveries to local areas
- 6 shoppers travelling by car
- 7 other freight movements
- 8 high occupancy vehicles
- 9 other private car users

Risk management

The implementation of the capital programme and achievement of targets are at risk from a number of sources, e.g. changes in economic conditions, statutory procedures, changes arising from consultation and utilities programmes.

As part of our overall project management processes we will manage these risks through:

- Active management of the programmes with regular monitoring throughout the year.
- A West Yorkshire Finance Monitoring Group which has been set up to ensure that the overall programme is on track. This group will also use monitoring data from the APRs to control the overall programme so that targets are met.
- Reallocation of resources from programme areas where progress towards targets is above that needed to those where it is poor. This would need to include development of new schemes.
- Use of over-programming as a management tool, particularly in those programme areas where delays to schemes are common.
- Use of framework contracts for consultants and contractors to cover

for lack of resources particularly at peak times in scheme development and implementation.

As part of the review processes the opportunity will be taken to re-allocate funding both between different elements of the programme and between district authorities. As in LTP1 this will be by agreement between the partner authorities, in the interests of enabling progress towards targets.

Value for money

For a number of years we have been undertaking before and after studies of a range of schemes to try and determine what works best. Many of these have been published in our Annual Monitoring Reports. In addition we examine best practice from partners and other authorities to make alterations to our methods of working where appropriate.

Local safety schemes are approached in terms of the 'first year rate of return' to measure value for money in reducing road injuries. The Highways Agency is developing analysis techniques on trunk roads and motorways to use information on damage only collisions to identify risk; we intend to use the findings to improve our performance.

Road Safety ETP initiatives are subject to evaluation to make sure that they have

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reached the appropriate audience and have had the required impact.

Combining integrated transport schemes (particularly safety schemes) and highway maintenance schemes to give a holistic approach to implementation is used by all district authorities. This can provide integrated transport benefits at relatively low cost.

The new Asset Management plans will bring better planned programmes of repair and renewal. These should ensure that maintenance is carried out at the most cost effective times in the life of an asset and give a better focused delivery and ensuring value for money.

Efficient methods of working have been developed over a number of years and will continue to be improved. Selecting the best price for the job from a mixture of in-house and term contractors has been the norm for many years.

Whole life costing is gradually being introduced though as this sometimes means higher initial costs for higher specification work progress is slow. Risk assessment of, for example, the likelihood of excavations by utilities is part of the calculation of whole life costs.

Value for money is not just about finance it is also about things that cannot be measured in financial terms such as landscape, severance and physical fitness.

Table 3.31 gives an appraisal of the proposed Action Plan against a range of measures that are used in the DfT New Approach to Appraisal (NATA) process. This appraisal is a largely subjective analysis as it has not been possible to undertake a full NATA analysis because of the complexity of dealing with large numbers of very diverse schemes.

This appraisal is for the overall LTP2 strategy excluding the effect of major schemes (which will be assessed in their individual appraisals).

Table 3.31: Appraisal Summary Table

Option		Description	Problems	Present Value of costs to public accounts
Overall LTP2 Strategy (excluding major schemes)		Improvements to accessibility, congestion, safety, air quality and more effective asset management through packages of bus, cycling, walking, safety, traffic and demand management measures	Increasing traffic levels and congestion, public transport reliability, level of casualties and quality of infrastructure. (See Part 1)	£286m capital – excluding majors £210m per year revenue
Objective	Sub-objective	Qualitative impacts	Quantitative assessment	Assessment
ENVIRONMENT	Noise	Constrained traffic growth (compared to do nothing) together with speed management and use of low noise surfacing will lead to noise reductions		Slightly beneficial
	Local Air Quality	Constrained traffic growth (compared to do-nothing) will lead to improved air quality	Reduction of 2,820 tonnes of NO _x per year by 2011	Beneficial
	Greenhouse Gases	Constrained traffic growth (compared to do-nothing) will lead to reduced greenhouse gas emissions	Reduction of 145,000 tonnes of CO ₂ per year by 2011	Beneficial
	Landscape	Few schemes will affect the landscape		Neutral
	Townscape	Schemes in town centres will facilitate townscape improvements but some transport infrastructure can detract		Slightly beneficial
	Heritage of Historic Resources	We would seek to enhance the environment in conservation areas and around listed buildings as part		Beneficial
	Biodiversity	Few if any schemes will affect biodiversity, may be slight benefits from 'Greenway' cycling schemes		Neutral
	Water Environment	Constrained traffic growth (compared to do nothing) and improved drainage may lead to slightly improved water environment through less water borne pollution		Slightly beneficial
	Physical Fitness	Pedestrian, cycling and travel awareness strategies encourage a healthier lifestyle with more cycling and walking		Slightly beneficial
	Journey Ambience	Better public transport – bus and rail station improvements, real time information, shelters, etc. Improved cycling and walking facilities		Beneficial

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Objective	Sub-Objective	Qualitative Impacts	Quantitative Assessment	Assessment
SAFETY	Accidents	Reduction in casualties through safety engineering measures and road safety education, training and publicity	Approx. 595 fewer people killed or seriously injured per year by 2010 compared to 1994-1998 average	Beneficial Present Value of Benefits - to be estimated for final LTP2
	Security	Continued use of CCTV, improved street lighting and improvements to staffing at bus and rail stations will improve security		Beneficial
ECONOMY	Transport Economic Efficiency: Business Users & Transport Providers	Reduction in vehicle operating costs through bus priorities and reduced congestion Increases in car costs for some journeys from demand management measures (e.g. increased parking charges)		Beneficial
	Transport Economic Efficiency: Consumers	Significant improvements to bus journey times Improvements to journey times along cycle and pedestrian routes Reduction in vehicle operating costs through reduced congestion (compared to do-nothing) but increases in car costs for some journeys from demand management measures		Beneficial
	Reliability	Improved reliability of bus journey times particularly along quality corridors Reduced congestion (compared to do-nothing) will improve car and lorry journey time reliability		Beneficial
	Wider Economic Impacts	Strategy supports regeneration initiatives City and town centre proposals will assist the local economy		Beneficial
	ACCESSIBILITY	Option values	Improvements to the available transport options for many areas particularly disadvantaged communities	
	Severance	Improvements to pedestrian movements and reduction in traffic (compared to the do-nothing) will tend to reduce severance		Slightly beneficial
	Access to the Transport System	Strategy includes significant initiatives to address social inclusion initiatives including a developing Accessibility strategy		Beneficial

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Objective	Sub-Objective	Qualitative Impacts	Quantitative Assessment	Assessment
INTEGRATION	Transport Interchange	Strategy includes significant improvements to interchange between all modes		Beneficial
	Land-Use Policy	Strategy supports and is supported by land use policies – UDPs, emerging LDFs and RSS through support for developments, parking standards, travel plans, etc		Beneficial
	Other Government Policies	Defra – improved access for rural communities DfEE - Improved access to schools and other education establishments DH – Improved physical activity through cycling and walking Home Office – reduced crime through CCTV and other security measures DTI – assisting businesses through improved journey reliability and operating costs		Beneficial