

# West Yorkshire Local Transport Plan 2011 • 2026

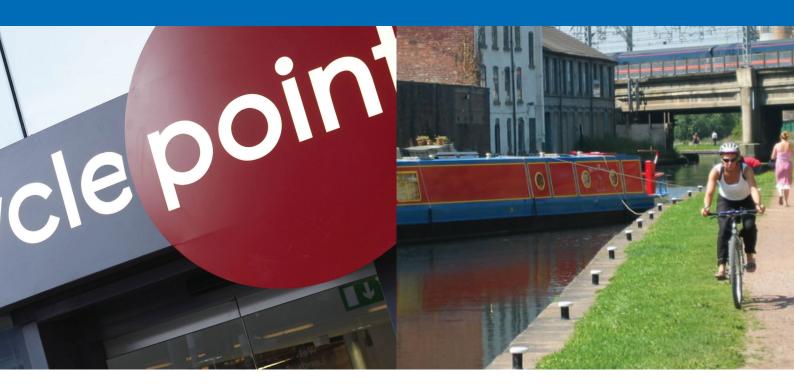


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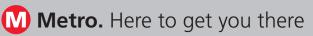


Connecting people and places

# **Transport Asset Management Plan**







# Foreword

I am pleased to present the West Yorkshire LTP3 Transport Asset Management Plan; West Yorkshire's strategic document setting out how we are going to manage and maintain our transport assets.

Transport Assets make journeys possible; from roads, railways, footways and cycle ways to bus real time and traffic management systems. The Transport Asset Management Plan sets out how the West Yorkshire District Councils and Metro will manage and maintain their assets to make sure we get maximum value for money whilst delivering what is expected and needed from a vibrant and busy transport network.



In the current economic cycle, the country is dealing with huge cuts in budgets across many areas of public spending. Transport assets are not protected from those cuts and we need to face up to the challenge of how to maintain and manage our asset base with less money.

We need this plan because our assets and network conditions have reached a critical tipping point where asset condition will worsen as a result of declining funding, severe weather and congestion.

The specific 15 year outcomes this Plan seeks are:

- Increased asset life;
- Increased asset value;
- Better value for money.

In the early years of the Plan, we will work across the whole of West Yorkshire on:

- Joint asset procurement to improve efficiencies;
- Whole life costing/ 'spend to save' initiatives to get more out of our current assets;
- Shared services to reduce staffing costs.

Initiatives are accompanied with specific targets to ensure that we manage the transport assets effectively. For the first time, this Plan focuses entirely on assets. It will help us deliver improved economic growth, lower carbon emissions and enhance people's quality of life across West Yorkshire.

James levis

Councillor James Lewis Chair West Yorkshire Integrated Transport Authority

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# **Contacting Us**

The West Yorkshire Integrated Transport Authority, Metro, (WYITA) is the statutory body with sole responsibility for the West Yorkshire Local Transport Plan (LTP).

As part of the LTP, the Transport Asset Management Plan has been prepared with the support of partners, stakeholders and members of the public. The Plan will be regularly reviewed and updated to reflect changing priorities and you can continue to contribute to such reviews.

If you have any further comments about this Plan, or just want to keep involved in the on-going work, please contact the LTP Partnership.



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| Version Changes for Local Transport Plan 3: Asset Management Strategy |            |                                     |  |  |
|---|------------|-------------------------------------|--|--|
| Version   | Date       | Description of change               |  |  |
| 1   | 03-10-2012 | DOCUMENT APPROVED BY ITA 27-07-2012 |  |  |

# Summary

The West Yorkshire LTP3 Transport Asset Management Plan (TAMP) sets out our direction and approach to ensure effective asset and network management.

We need this Plan because asset and network conditions have reached a critical tipping point where condition will be severely reduced as a result of declining funding, severe weather and congestion. National and DfT policy recommends we produce a TAMP as the best way to identify the issues and to set the direction for what should be achieved. The Plan will ensure that actions are put in place to help address the current problems. New funding sources will have to be secured to go onto improve asset condition.

The Plan is written to enable West Yorkshire residents, transport users, public transport operators and local businesses to see how we intend to improve the management and maintenance of our transport assets. We will use the Plan to support our investment decisions and for securing additional funding sources.

The Plan complements the existing maintenance manuals and framework guides such as the national codes of practice and District Council's own Highways Asset Management Plans (HAMPs). The Plan is intended as a strategic document whereas the manuals, frameworks and HAMPs provide the detailed technical requirements.

The Plan supports the West Yorkshire MyJourney Local Transport Plan (LTP3) 2011- 26 available at www.wyltp.com, which sets out the overall strategic direction for transport planning in West Yorkshire.

Delivery of the Implementation Plan will help address the problems that we are now seeing in congestion, potholes and declining asset condition. The first



Implementation Plan proposes greater collaboration and procurement to maximise value for money and efficiency of our investment to work towards offsetting the reduced budgets.

The Plan sets out how good asset and network management contributes towards the 3 key objectives of LTP3 in supporting economic growth, promoting low carbon and enhancing people's quality of life.

Longer term, greater investment back to pre- recession levels will be required to return condition and network levels back to what is expected by the public and what businesses need to grow. For example, during the first Implementation Plan period the West Yorkshire LTP Partnership would have to spend an additional £22m on road maintenance over that planned to get condition back to 2009/10 levels when condition peaked. The first step is to ensure we maximise the value of every pound spent on the management and maintenance of our network.

# **1** Introduction

# **1.1 Transport Assets**

Transport Assets make journeys possible; from roads, railways, footways and cycle ways to bus real time and traffic management systems. The Transport Asset Management Plan sets out how the West Yorkshire District Councils and Metro will manage and maintain the transport assets to make sure we get maximum value for money whilst delivering what is expected and needed from a vibrant and busy transport network.

West Yorkshire's Transport Assets include, for example:

- 10,000 km of roads
  - o Leeds 2,940 km
  - o Kirklees 1,980 km
  - o Bradford 1,930 km
  - o Wakefield 1,360 km
  - o Calderdale 1,200km
- 274,000 street lights
- 800 road bridges and 700 footbridges
- 1,300 km of retaining walls
- 15,000 bus stops and shelters
- 25 bus stations and bus points

Recent valuation exercises put the value of West Yorkshire's transport assets at £10bn supported by £100m per year of revenue budget to look after those assets. But it is not just about the physical worth of the assets themselves, it is about the management of those assets to ensure they support the economy and allow business to happen.

# 1.2 West Yorkshire Local Transport Plan

The Transport Asset Management Plan should be read in conjunction with the West Yorkshire MyJourney Local Transport Plan (LTP3) 2011-2026 available at www.wyltp.com. LTP3 sets out the strategic direction for transport across West Yorkshire.

# 2 Vision and objectives

LTP3 is called 'MyJourney' to reflect the focus on customers at the heart of the Plan. The LTP3 Vision for transport in West Yorkshire is:

# 2.1 Our Vision



MyJourney West Yorkshire Vision 2026 - connecting people and places

Working together to ensure that West Yorkshire's transport system connects people and places in ways that support the economy, the environment and quality of life.

# 2.2 Objectives

Three key objectives of LTP3 for achieving the MyJourney West Yorkshire Vision over the next 15 years are:

| 1 | Economy. To improve connectivity to support economic activity and growth in<br>West Yorkshire and the Leeds City Region.   |
|---|--|
| 2 | Low-Carbon. To make substantial progress towards a low carbon, sustainable transport system for West Yorkshire, while recognising transport's contribution to national carbon reduction plans. |
| 3 | Quality of Life. To enhance the quality of life of people living in, working in and visiting West Yorkshire.   |

This Plan sets outs ways to achieve all these Objectives. It also sets out measures to mitigate against any adverse impacts that looking after our assets might have.

# **3 Evidence and Issues**

## 3.1 What do we measure?

This Chapter considers the evidence and the performance condition measures of our assets. The performance measures are examined for:

- Roads
- Footways
- Street Lighting
- Bridges
- Bus shelters
- Customer satisfaction

# 3.2 How are we doing?

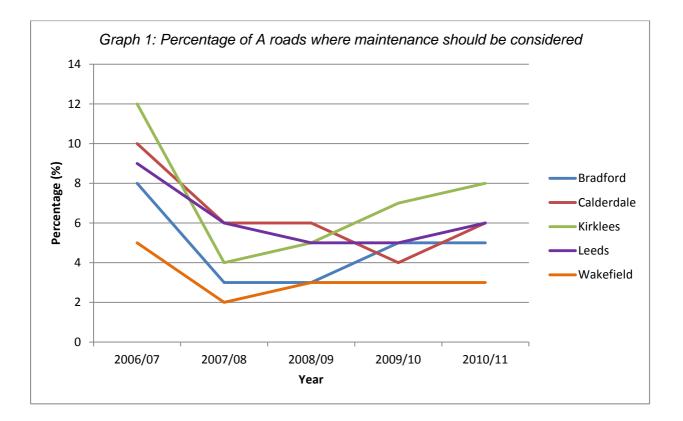
#### **Road condition**

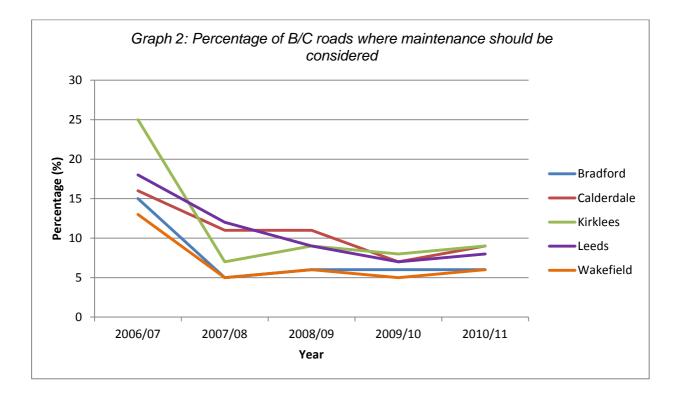
Customers are telling us that the condition of transport assets is very important. In the West Yorkshire Customer Satisfaction Transport Tracker Survey 2011, customers said that the condition of roads was rated as the most important aspect of the transport network. However, when asked to rate satisfaction, customers scored road condition poorly when compared with other aspects of the network.

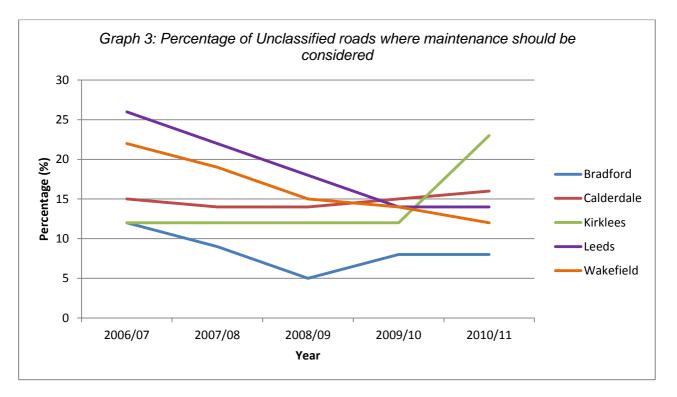


The condition of the roads varies across West Yorkshire. Graphs 1 - 3 set out the condition for A, B/C and Unclassified roads. The graphs show how condition has varied across the districts over the past five years. For 2010/11, the data shows that in West Yorkshire:

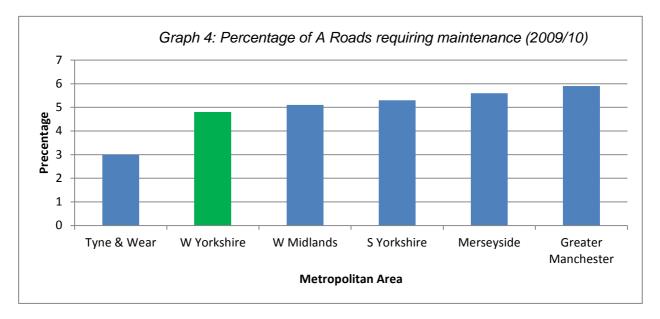
- A roads: Wakefield have the best A roads, Kirklees has the worst;
- B/ C roads: Bradford and Wakefield have the best B/ C roads, Calderdale and Kirklees has the worst;
- U roads: Bradford have the best U roads, Kirklees have the worst.

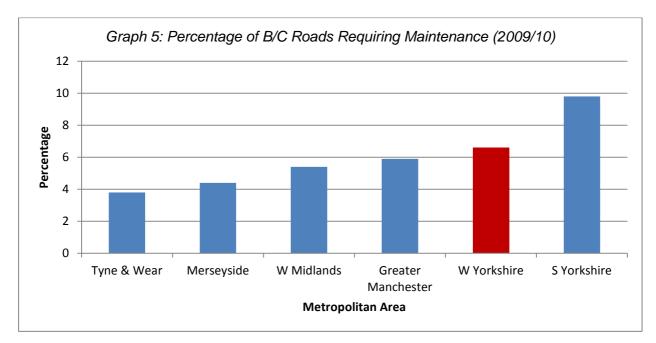


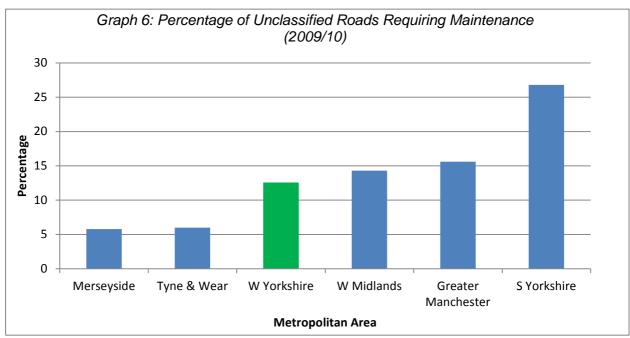




Graphs 4- 6 show the percentage of roads requiring maintenance in West Yorkshire compared to other Metropolitan areas outside London. Green indicates that we are performing better than the Metropolitan average; red indicates worse than average.







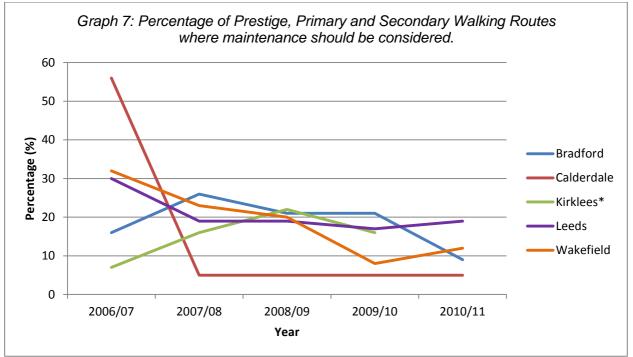
Nationwide, West Yorkshire has better than average condition for A roads and Unclassified roads when compared to other metropolitan district areas, but poorer condition for B and C roads.

Different road conditions may be explained by geographic variations, or differences in maintenance and procurement methods between areas.

#### **Footway Condition**

Over the last five years footway condition has improved on the whole. However, some District Councils have now stopped measuring footway condition, so it is difficult to continue to draw comparisons. Only 5% of the footway network is routinely measured - prestige, primary and secondary footways. The measure focuses on these heavily used footways in town and city centres.

Graph 7 shows how footway condition has varied across West Yorkshire over the past five years. For 2009/10, the data shows that Calderdale have the best condition footways, whilst Leeds have the poorest condition footways.



<sup>\*</sup>No data for Kirklees in 2010/2011

#### **Street Lighting**

Customers tell us that good street lighting is important to them (see later section on 'Customer Satisfaction). Well lit streets help provide safer roads and footways. Table 1 shows the total number of street lighting columns per District (274,000 in West Yorkshire). Leeds and Wakefield both have a street lighting Private Finance Initiative (PFI) in place so have had a significant amount of recent investment which has renewed most of their stock. However, poor condition of a large proportion of lighting stock is an issue in Bradford, Calderdale and Kirklees where 25%- 35% of stock is in need of immediate repair.

| District                 | Bradford | Calderdale | Kirklees | Leeds  | Wakefield |
|--------------------------|----------|------------|----------|--------|-----------|
| Number of street lights  | 57,704   | 30,700     | 51,995   | 92,171 | 41,202    |
| % in need of replacement | 35%      | 26%        | 25%      | 2%     | 0%        |

#### Table 1: Lighting stock and condition by District

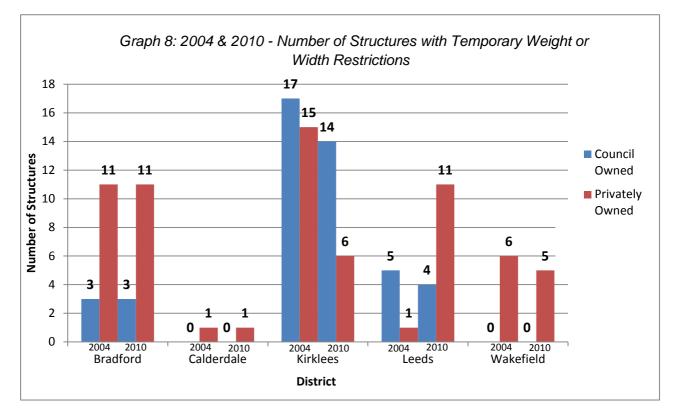
Energy is an important area, both in terms of the significant cost of energy (about 23% of District Council's total highways revenue spend), its carbon output and the continuing higher than inflation increase in energy costs. The Yorkshire Purchasing Organisation forecast that electricity costs will increase by 50% by 2017/18. The impact of energy cost rises over the last five years has impacted on the District Councils differently. For example, the lighting energy costs have increased by 71% in

Kirklees and 102% in Calderdale, but Bradford has seen a reduction of 14% over the same time period. This is because the purchase of energy is handled differently, ranging from initiatives which have maximised the number of columns lit per unit of energy to increasing energy use by increasing the number of lit columns. The Implementation Plan will set out our approach to ensuing that best practice is identified and implemented to ensure efficiency savings are maximised.

#### Bridges/ Culverts with weight/ width restrictions

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

The percentage of structures with temporary weight or width restrictions is used to monitor performance in this area. The position in 2010 is reported in Graph 8 below from a 2004 baseline.

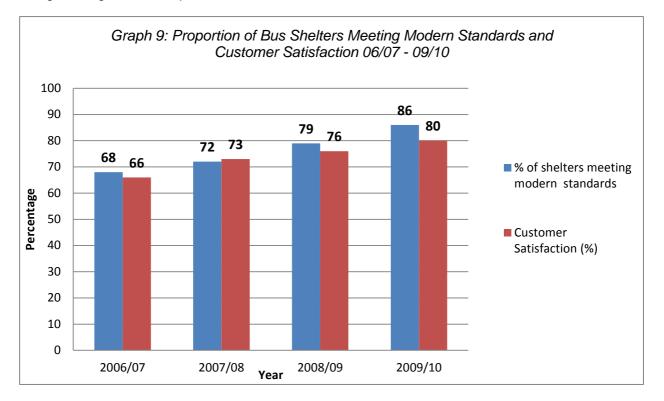


Completion of the strengthening programme during LTP2 (2006-11) allowed all restrictions to be removed, except where permanent weight restrictions are acceptable. Hence, for Council owned structures, they are now free from restriction with the exception of sub-standard bridges under monitoring regimes where restrictions are not significant. These represent about 1.5% of structures in West Yorkshire. In addition, continued pressure on private bridge owners is required to ensure that their weak structures are strengthened within a reasonable timescale. To date, weight and width restrictions have been used to measure condition, however it is now considered that these are not the best way to indicate the condition of the structures stock. Going forward, the LTP Partnership will look to adopt new bridge condition indicators to measure performance and condition such as the ADEPT Bridge Stock Condition Indicator System (BSCI).

#### **Bus shelters**

Market research has indicated that people's perception of public transport is greatly influenced by the length of time they wait for a service. This is evident in the comparison of the percentage of shelters meeting modern standards in West Yorkshire's and overall customer satisfaction with them. Since 2003/04 both have increased significantly.

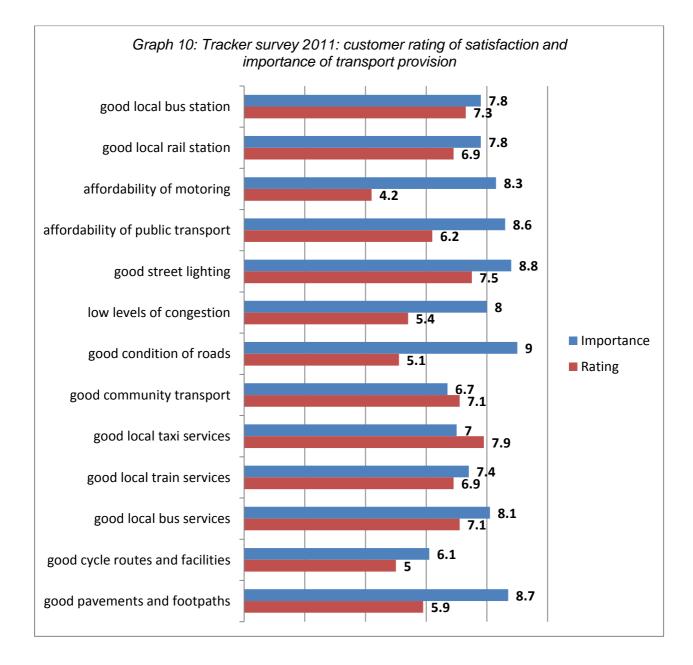
Graph 9 shows the percentage of shelters meeting modern standards and indicates good progress is being made towards our target of 95%. Modern standards are defined as having full glazing, a light and seat meeting DDA requirement. Public satisfaction with bus shelters is also showing strong year on year improvement. Satisfaction is measured on a scale of 1 to 10 with 10 being good and 7 being the target score for public satisfaction.



#### **Customer Satisfaction**

Market research is undertaken by means of the annual West Yorkshire Transport 'Tracker' survey; this is a well established customer research method that has been developed and used within West Yorkshire for approximately ten years. More recently, the Tracker survey has included satisfaction measures for highway and footway condition.

In 2011, the first year that highway and footway satisfaction was reviewed, it showed that good street lighting, good condition of roads and good pavements/ footpaths are ranked as the top 3 most important valued areas of transport provision (see Graph 10). However, customers rate satisfaction in these areas as low, compared to other transport provision. This reflects both the backlog in highways maintenance and the recent decline in highway asset condition. This plan aims to put in place measures to address condition and improve customer satisfaction. This will continue to be monitored through the tracker survey.



## 3.3 Trends

Condition of all of our transport assets has improved over the period 2000- 2010, peaking for road condition in 2009. However, since then the condition of roads has deteriorated.

Heavy goods vehicles (HGV's), due to their weight, can be one of the main factors that cause roads to deteriorate. However, it is likely that the impact of the severe winters of 2009/10 and 10/11 and the reduction in maintenance budgets are the major contributory factors on condition deterioration in recent years.

Recent winters have been the coldest for 30 years, a factor which can rapidly speed up the deterioration of all assets, particularly roads. For example, de- icing salts have a very detrimental effect on concrete and steel structures as it accelerates the deterioration. Over this time, investment in maintenance operations peaked in 2009/10 but has reduced since then.

#### Spend per km per district 2011/12

| District            | Bradford | Calderdale | Kirklees | Leeds  | Wakefield |
|---------------------|----------|------------|----------|--------|-----------|
| Spend per km<br>(£) | 9,669    | 9,264      | 9,492    | 12,028 | 10,288    |

Table 2: Spend per km of road 2011/12

Leeds, the highest spender per km of highway, spends 30% more per km on maintaining the highway asset than Calderdale (the lowest). This figure includes all costs of maintaining the highway, including, for example, resurfacing, lighting energy costs and winter maintenance. However, the condition of the roads in the two Districts is broadly similar. There could be many reasons for the similar ranking of condition, yet different spending levels - Leeds addressing a larger backlog of works or differences in maintenance practices and procurement. Further investigation will be carried out to identify best practice and roll out.

#### Claims for personal injury and insurance

District Councils settle insurance claims for slips, trips, falls and car accidents/ damage where they are at fault due to poor maintenance or for not following agreed maintenance regimes. The total value of claims in West Yorkshire is approximately £7m per year (2011/12).

There is variation between the Districts in the levels of claims per km, however the causes are not clear. Further research will be carried out to reduce the level of claim payments over time.

# 3.4 What are the key Issues?

There are a number of key issues which adversely impact on the ability to manage our transport assets effectively, including:

- Declining funding, increasing raw material costs, leading to reduced investment in maintenance;
- Congestion;
- Extreme weather weakening and disrupting assets.

These issues are set out in more detail below.

#### **Declining Funding**

In the current economic cycle, the country is dealing with huge cuts in budgets across many areas of public spending. Transport and asset management are not protected from those cuts and needs to face up to the challenge of how to maintain and manage a fixed asset base with less money, specifically:

- 20% reduction across West Yorkshire in LTP Maintenance funding during Implementation Plan 2011- 14 (varies District by District from -8% to -28% according to the DfT maintenance formulae);
- 50% reduction in the LTP Integrated Transport funding for new capital projects during Implementation Plan 2011- 14;
- Reduced maintenance revenue budgets due to reductions in the level of funding provided by Central Government to Authorities and no rises in council tax (varies by District)
- Background of above inflation raw material price rises. For example, the global increase in oil prices has led to a 60% cost increase in the price of bitumen over the last 2 years,, a core component used in road resurfacing;
- Direct cause and effect with the amount of money spent spend less, resurface less and condition worsens;
- £300m roads maintenance backlog in West Yorkshire already;
- 25% inefficiency in maintenance procurement processes and that if best practice was adopted across the country 25% cost savings could be achieved (Audit Commission, 2011);
- Pay-outs for liability claims taking money away from maintenance;
- New schemes and projects expand the capital asset base but usually include additional revenue maintenance funding, adding to the overall maintenance burden.

The impact of reduced funding means we have less ability to undertake planned maintenance and to respond as quickly to urgent responses, such as pot holes. For example, switching to cheaper 'quick fix' treatments may patch the problem today, but will reduce the overall life of the asset in the long term. Also, if a road that needs re-building is only patched on the surface instead, it is likely the underlying condition of the road will continue to deteriorate further, create safety issues from further pot-holes, cause more vehicle damage, and more lane closures for repair and resultant congestion in the future. The reduction in funding will severely impact upon the effectiveness of the network to support and sustain the business requirements that are expected from it.

#### Congestion

Congestion results in increased costs to the economy, business and the community due to lost time spent in congested traffic. For example, delivery organisations need more vehicles to make the same number of deliveries, lost productive time by people delayed in congestion, and poorer air quality caused by queuing traffic. Congestion is estimated to cost West Yorkshire's economy over £250m in lost productivity every year (West Yorkshire Travel Plan Network).

The largest congestion on the roads is caused by the morning and evening peak hour periods. Business values reliability of journey times, but half the road network is congested and slow at peak times.

One third of highways congestion is caused by road and street works. Analysis has shown that the costs can be significant, for example, the cost of delay to vehicular traffic caused by street and road works on the major road network is almost £150 million per year in West Yorkshire.

#### **Extreme Weather**

The environment is a major factor which can affect asset condition. Whilst maintenance processes try to protect the assets from the

### CASE STUDY: The impact of congestion on small business

Surveys by the Federation of Small Businesses show that congestion was their members' greatest concern. Over a quarter (26%) of their members reported cost increases due to the increased time taken for journeys. They reported that the impact of congestion was on average 7.5 working hours lost per week.

effects of cold in winters and the heat of summers, extreme weather events can severely impact upon the condition of the transport assets. For example, constant freeze - thaw cycles in winter can break up the surface of roads and rapidly result in pot holes and poor surfaces. Climate change - the belief that weather will become more extreme in the future - will speed up the deterioration of assets and require additional maintenance to maintain similar levels of condition. There is some local evidence that climate change has already resulted in some severe weather events in recent years.

Based on existing green house gas emission projections, the average global surface temperature could increase by 4°C by the end of this century. The resultant global warming will modify our climate and increase our risk of experiencing severe weather events. It is expected that we will get milder and wetter winters, warmer and drier summers and more frequent and extreme weather events. Severe weather events can include more intense rainfall, storms/high winds and increased flooding.

Severe weather events are already happening. Locally, there were 24 severe weather events across West Yorkshire in 2000- 2010 (WY Local Climate Impacts Profile, 2011). The impacts ranged from gridlocked roads on the days it snowed, to inaccessible residential streets because of salt shortages/ rationing and longer term deterioration in road condition such as pot holes. The most frequent severe weather events included flooding, gales, snow/ ice and heat waves. By means of example, the winters of 2009/10 and 10/11 were the coldest for 30 years. There is a need to prepare for more frequent extreme weather events, but this comes at a significant financial cost.

The three main impacts from extreme weather events on the transport system have been identified as:

- Traffic congestion;
- Public transport disruption, and;
- Damage to infrastructure.

Assessing the cost of climate change related weather events is extremely difficult. Many of the actions taken during these events such as road closures, provision of alternative transport and unblocking drains are unrecorded. To be better prepared for extreme weather events will require more investment. Measures could include building up the height of flood defences next to key transport links, more frequent maintenance of gullies and providing more resistant road surfaces.

# 3.5 Summary

The combination of reducing funding, congestion and extreme weather is creating significant difficulties for effective asset management. It is leading towards cheaper 'quick fix' solutions in an attempt to maintain the same asset base with less money, but over the longer term results in deteriorating asset condition, deteriorating levels of safety and ability to properly manage the network over time.

Short term practices are also storing up bigger problems for future; skipping proper maintenance now will lead to more costly structural replacement in the future.



The following Chapter sets out the approach to tackle these issues.

# **4 Strategy**

'Assets' is one of the four key themes of the West Yorkshire Local Transport Plan 2011- 26:

Transport Assets

To ensure effective management of transport assets to gain maximum value for money and meet the Plan's objectives

# 4.1 Assets strategy in LTP3

Effective management of Transport Assets is needed to support the key objectives set out in LTP3. Five proposals are prioritised in LTP3, detailing the overall approach to assets:

Proposal 1

Prioritise asset management and maintenance standards according to a **hierarchy of key transport route networks and users** that best supports the Plan.

#### Proposal 2

Work with partners to ensure that all assets are **maintained** and **managed** to a standard that is **suitable and sufficient** for their **desired use**.

#### **Proposal 3**

Adapt assets to be **resilient to predicted weather effects caused by climate change** over the long term.

#### **Proposal 4**

Use new **network management** practices to **minimise congestion and ensure efficient recovery** from disruption.

#### Proposal 5

Minimise the **carbon footprint and emissions** of assets and associated management and maintenance practices.

The overall approach for Transport Assets is to ensure effective management of all transport assets to maximise value for money and deliver the LTP's objectives.

This means working towards well managed and appropriately maintained transport assets which meet the needs of users. The specific outcomes being sought over the life of the Plan include:

• Increased asset life;

- Increased asset value;
- Better value for money.

With limited resources available, it is essential to prioritise highways maintenance to safeguard the public sector's largest asset value and to limit the liabilities in the future.

The focus of the first Implementation Plan will therefore be to protect the condition of the assets and to halt further deterioration as far as possible. Once funding levels are improved, or new funding sources are secured, it will be possible to improve asset conditions.



# **5 Implementation**

This chapter looks at what we will do to look after our assets whilst addressing the issues identified in Chapter 3, and in the longer term deliver increased asset life, asset value and better value for money.

# 5.1 Funding

An estimated £334m of capital and revenue funding will be utilised on maintaining West Yorkshire's transport assets during the first three year LTP3 Implementation Plan period (Table 3). There are three main sources of funding:

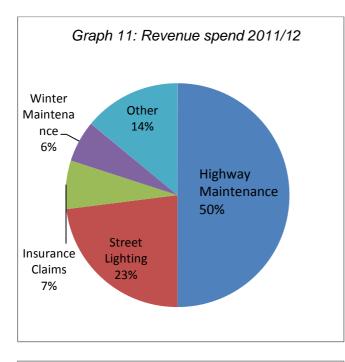
- LTP Highways Maintenance Block: a capital grant provided by Central Government to the ITA and distributed to District Councils for the maintenance of all types of transport infrastructure. £79m is available in West Yorkshire over the three year Implementation Plan period.
- LTP Integrated Transport Block: a capital grant provided by Central Government to the ITA. Some funding has been allocated to maintain transport assets and for network management purposes. A total of £5m has been made available over the Implementation Plan period.
- Authority Revenue Budgets: District Councils and Metro allocate some of their local revenue funding for asset maintenance. Generally revenue is generated locally from sources such as Council Tax. During 2011/12, £83m was allocated for maintenance.

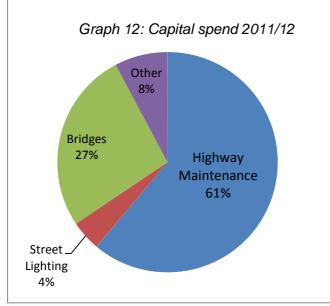
| Description   | 2011- 2014      | 2011-2014 (estimate based<br>on 2011/ 12 levels) |
|---|-----------------|--|
|   | Capital (£000s) | Revenue (£000s)                                  |
| Maintenance Block Allocation                        |                 |  |
| WY Transport Asset Management Plan –<br>Maintenance | 78,869          | 234,000  |
| SUBTOTAL: MAINTENANCE                               | 78,869          | 234,000  |
| Integrated Transport Block Allocation               |                 |  |
| Network Management                                  | 1,229           | 2,490  |
| Public Transport Assets                             | 4,270           | 13,878   |
| TOTAL ASSETS  | 84,368          | 250,000  |

#### Table 3: Capital and Revenue Funding

The table above sets out an estimated £334m of funding available during the Implementation Plan period to ensure the effective maintenance of Transport Assets.

By means of example, the following charts show the capital and revenue budget areas for 2011/12:





Using the 2011/12 revenue budget as an example, Graph 11 shows that approximately 80% will be utilised on maintaining the highway (resurfacing the road, lighting and winter maintenance). At 7% of the budget, pay outs for insurance claims for slips, trips and accidents due to condition problems such as pot holes is a cause for concern. The overall vision and objectives seek to gain maximum value for money so reducing the level of claims is an important outcome sought in the Implementation Plan.

Using the 2011/12 capital budget as an example, Graph 12 shows that approximately 92% will be used on maintaining the highway (the majority of which will be utilised on maintaining roads such as resurfacing and on bridge maintenance). Of the remainder of the capital budget, 8% will be utilised on maintaining the public transport assets and on network management initiatives. The plan will ensure that processes are reviewed to ensure value for money is achieved.

# 5.2 TAMP Implementation Plan (2011-14)

LTP 2011-26 is supported by a series of shorter term Implementation Plans. These cover a series of three year blocks and will be guided by the amount of funding available and local priorities for that period. The first Implementation Plan 2011- 14 will utilise £250m (estimate) revenue and £84m capital to maintain the assets.

We have considered the evidence (Chapter 3) and overall strategic approach (Chapter 4) for assets and have identified our most important investment priorities to deliver increased asset life, asset value, and better value for money. The top 3 priorities are; Priority 1: Joint Procurement to improve effectiveness;

Priority 2: Whole life costing/ spend to save initiatives to get more out of our current assets;

Priority 3: Shared services to reduce staffing costs.

These 3 priorities have been used to shape the content of the first Implementation Plan. Initially, 9 Asset Reviews have been identified for inclusion in the Implementation Plan.

**Review 1: Urban Traffic Management Control (UTMC)** - to develop a single West Yorkshire maintenance contract and a single virtual design team for Urban Traffic Management Control (UTMC). UTMC is the software which brings data together in one place to enable better management of information leading to better traffic flows. Shared service working and joint procurement will lead to better value for money.

**Review 2: Highways Procurement** - to review all aspects of the procurement of highways maintenance including winter salt, road surface dressing and treatments. Implementing joint procurement and whole life costing practices will lead to increased asset life, increased asset value and better value for money.

**Review 3: Bridges** - to establish a single West Yorkshire bridges team and shared services to deliver better value for money.

**Review 4: Flood Risk Management/ Climate Proofing -** to review collaborative working for flood management in sharing intelligence, data and best practice to deliver better value for money.

**Review 5: Highways Design -** to develop consistent design standards and procurement, for example in contracts to deliver better value for money and increased asset life and value.

**Review 6: Street Lighting** - to review collaborative working opportunities for street lighting and evaluate shared services and efficient procurement to deliver better value for money.

**Review 7: Public Rights of Way** - to review collaborative working opportunities for public rights of way on legal responsibilities, mapping and developing joint funding bids to deliver better value for money.

**Review 8: Transport Modelling -** to establish shared services for specialist modelling staff as a district wide resource to deliver better value for money.

**Review 9: Road safety -** to review collaborative working initiatives in roads safety to deliver better value for money.

The focus of the TAMP is to ensure that efficiencies are realised in the way things are managed and to make progress towards operating the same asset base, to a high standard, but with reducing budgets. Longer term, once funding improves or new funding sources are secured, it will be possible to increase the level of funding spent on low carbon and quality of life initiatives.

# 5.3 **Priority 1: Joint procurement**

The Audit Commission estimate that there could be up to 25% efficiency savings across maintenance budgets if best practice techniques were adopted across all areas; for example, the development of standard specifications and collaboration and joint procurement.

Collaboration can yield significant benefits. The Midlands Highway Alliance (a partnership between the District Councils and the Highways Agency in the East Midlands), for example, estimates it has delivered £13 million savings in the first three years since it was set up in 2007. The Alliance estimates it will save a further £14 million between 2010 and 2014. A large part of the savings is made up from authorities in the alliance being able to use framework agreements, hence avoiding individual procurement costs.

What we will do:

Action 1: We will work with partners to develop joint procurement practices to achieve efficiency saving of approximately £2.5m per annum by 2013/14. We will work together to put in place standard specifications, tender documents and working practices, and identify specific efficiency savings of £2.5m per year by 2013/14 across all 9 Asset Reviews during the first year of the Implementation Plan.

# 5.4 **Priority 2: Whole life costing (WLC)/ spend to save**

There are essentially two main approaches for prioritising investment on asset maintenance; for example;

- Reactive spend on highways, repairing/ patching stretches of road that have failed;
- Planned maintenance on highways, minimising 'whole life costs' by focusing maintenance to prevent the road reaching its failure point.

Within West Yorkshire, we have adopted elements of both approaches in our maintenance strategies and will continue to do so. However, moving forward, we will focus on the importance of the long term costs of maintaining the asset rather than just doing a quick and cheap fix. Investing a little more for a longer term solution is better value for money in the long term. For example;

- Planned maintenance costs 7 times less to keep a road in good shape compared to what would have to be spent on reconstruction once it has fallen into poor condition;
- Good maintenance can extend the roads 'whole life' by a further 18 years before reconstruction is required.

Reinstatement work by statutory undertakers (the companies who dig up the road to repair or lay water and gas pipes, and electric and telecommunications cables) can sometimes reduce the road's life. Working with statutory undertakers to ensure high quality repairs will help to improve the condition of the road and extend its life.

Improving asset condition can also reduce the number of claims for slips, trips, accidents and vehicle damage due to uneven and unsafe surfaces. This in turn will enable more investment to be directed to maintenance, rather than on claims..

Whole life costing is not just about the financial costs, it also takes into account environmental impacts. This helps to increase the resilience of our assets, mitigate against the effects of climate change, reduce the impact of emissions on local communities and support the wider LTP3 objective of carbon reduction.

What we will do:

Action 2: We will identify specific efficiency savings that can be realised through implementing whole life costing during the first year of the Implementation Plan and implement spend to save initiatives by 2014.

Action 3: We will reduce the number and cost of insurance claims by 10% by 2014 for slips, trips, accidents and vehicle damage due to poor condition of the asset.

## CASE STUDY: The Highways maintenance Efficiency Programme (HMEP)

HMEP is a DfT backed national initiative which aims to identify best practice to realise efficiency savings in highways maintenance. West Yorkshire has submitted many case studies to the programme. For example, Kirklees Council have installed new equipment and operational procedures which has achieved cost savings of 6% and dimming streetlights has achieved a 20-30% reduction in energy consumed.

# 5.5 Priority 3: Shared services

Resources are reducing yet public expectations remain high, extreme weather events are more frequent and we have the same number of assets and network to manage.

Sharing staff resources across the LTP Partnership and partnering with private sector companies is one way to ensure that service levels can be maintained. Consolidating responsibilities across the Partnership will offer efficiency savings. For example, a successful partnership exists where Leeds Council manage the traffic signals in Calderdale on behalf of Calderdale Council.

What we will do:

Action 4: We will work with partners to identify efficiency savings that can be realised through implementing shared services during the first year of the Implementation Plan and implement 'spend to save' initiatives by 2014.

# 5.7 Summary

| Action | Action   | Start         | End         | Target                                   | LTP<br>Proposal | LTP<br>Objective                         |
|--------|--|---------------|-------------|--|-----------------|--|
| 1      | Implement Joint<br>Procurement and<br>deliver £2.5m<br>cost savings per<br>year      | April<br>2012 | Mar<br>2014 | To be<br>identified<br>by March<br>2013* | 2               | Cost<br>savings/<br>help GVA             |
| 2      | Implement Whole<br>Life Costing in<br>new maintenance<br>and investment<br>decisions | April<br>2012 | Mar<br>2014 |  | 2 and 5         | Cost<br>savings/<br>GVA/ CO <sub>2</sub> |
| 3      | Reduce the level<br>of pay-outs for<br>insurance and<br>liability claims             | April<br>2012 | Mar<br>2014 |  | 2               | Cost<br>savings/<br>GVA                  |
| 4      | Review working<br>practices to<br>deliver shared<br>services                         | April<br>2012 | Mar<br>2014 |  | 2               | Cost<br>savings/<br>GVA                  |

Table 4: Implementation Plan

#### \*Efficiency savings to be identified during the first year of the Implementation Plan

The challenge set out in Chapter 3 was to continue to effectively maintain and manage our transport assets and network to best meet the needs and aspirations of customers at a time of declining resources, more extreme weather events and cost increases.

The Implementation Plan set out in Table 4 details what we will do to meet this challenge and deliver the three key outcomes;

- Increased asset life;
- Increased asset value;
- Better value for money.

This Plan will be challenging to deliver, but is essential to bridge the gap between the asset condition customers want and reduced levels of funding. Ultimately, only by securing new funding sources will it be possible to go further and improve asset condition.

# **6 Project and Performance Management**

## 6.1 How will we know we have been successful?

In the short term, the condition of some assets will generally continue to worsen. For example, Graphs 1-3, show that good road condition peaked in 2009/10 but has generally declined since. Given the recent severe winters and reducing budgets, that downward trend is likely to continue in the short term. However, the rate of decline will be slowed due to the implementation of the initiatives outlined in the Implementation Plan.

Intermediate milestones will be established (by March 2013) to take us towards a set of longer term targets proposed for 2026 in Table 5 to:

- Increase asset life;
- Increase asset value;
- Deliver better value for money.

These outcomes will be monitored annually over the Implementation Plan period. A monitoring process is also set out.

On an annual basis, we will monitor:

- Cost savings from Joint Procurement;
- Cost savings from WLC/ Spend to Save;
- Cost savings from Shared Services;
- Asset conditions and performance surveys as shown in Table 5.

| Asset type                    | 2009/ 10<br>condition   | 2014 Target<br>Condition | 2026 Target<br>Condition  | Proposed<br>monitoring regime   |
|-------------------------------|---|--------------------------|---|---|
| A roads                       | 4.8%<br>in need of<br>maintenance   |                          | No more than 4.8%.  | Annually*   |
| B roads                       | 6.6%<br>in need of<br>maintenance   |                          | No more than 6.6%.  | Annually*   |
| C roads                       | 6.6%<br>in need of<br>maintenance   |                          | No more than 6.6%.  | Annually*   |
| Unclassified<br>roads         | 12.6%<br>in need of<br>maintenance  |                          | No more than 10%.   | 25% annually, so<br>each road surveyed<br>every 4 years                                 |
| Town and city centre Footways | 11.9%<br>in need of<br>maintenance  | To be confirmed by       | No more than 15%.   | 50% annually, so<br>each surveyed every<br>2 years                                      |
| Other Footways                | Not collected<br>WY wide  | Summer 2012              | To be<br>determined<br>when full audit<br>complete  | 25% surveyed<br>annually, so each<br>surveyed every 4<br>years                          |
| Bridges                       | 1.85% of council<br>owned/ 8.5% of<br>privately owned<br>structures with<br>temporary<br>weight/ width<br>restriction |                          | 90- 94%<br>ADEPT Bridge<br>Stock Condition<br>Indicator (BSCI)                            | In accordance with<br>the ADEPT Bridge<br>Stock Condition<br>Indicator System<br>(BSCI) |
| Bus shelters                  | 86% meeting<br>modern<br>standards  |                          | 90% meeting<br>modern<br>standards  | Annually  |
| Customers                     | 5.1 rating out of<br>10 for the good<br>condition of<br>roads   |                          | To increase the<br>score in line<br>with overall LTP<br>satisfaction. To<br>be confirmed. | Annually  |

#### Table 5: Condition and proposed monitoring regime

\*Annual road condition surveys include one direction of the road so that each side of the road is surveyed every two years. It is an aspiration to achieve this level of frequency in the monitoring regime for other footways during the course of the 15 year strategy. Not all Districts may achieve this frequency in the early years of the plan.

# Glossary

This is a list of technical terminology used throughout this document, with their definitions.

| ADEPT   | Association of Directors for Environment, Economy, Planning and Transport.   |
|---|--|
| Transport Asset<br>Management Plan            | A plan of how the network of highway and public transport assets are managed and maintained.   |
| Network Management                            | Operation and procedures which keep the road system running smoothly.  |
| DDA   | Disability Discrimination Act  |
| Heavy goods vehicles<br>(HGV's)               | Goods motor vehicles (i.e. trucks/ lorries) over 3.5 tonnes gross vehicle weight.  |
| Urban Traffic<br>Management Control<br>(UTMC) | A specialist form of traffic management which integrate and co-<br>ordinate traffic signal control over a wide area in order to control traffic flows on the road network. |

# **Further information**

If you have any queries about this document, or If you would like this information in other formats such as Braille, large print or in audio format (CD / MP3) or in other languages, please contact us:

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