

# MyJourney

West Yorkshire Local Transport Plan 2011 • 2026

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# Network Management Plan













### **Foreword**

I am pleased to present the West Yorkshire LTP3 Network Management Plan, West Yorkshire's strategic document setting out our direction and approach to managing the transport network.

The Traffic Management Act 2004 imposes the network management duty, which requires local traffic authorities to do all that is reasonably practical to manage the network and to keep traffic moving. Our transport network including roads, railways, footways and cycle-ways and needs to operate as effectively as possible to support the economy, the environment and quality of life of those living, working and visiting the



West Yorkshire area. The Plan has been prepared by the West Yorkshire councils in partnership with Metro, the Integrated Transport Authority. In the current economic cycle, the country is dealing with huge cuts in budgets across many areas of public spending. Resources to effectively manage the highway network are not protected from those cuts and we need to face up to the challenge of how to discharge our duties under the Traffic Management Act including improving network performance in support of our communities, in a way that represents value for money.

The Plan has been prepared to enable West Yorkshire residents, transport users, public transport operators and local businesses to see how we will fulfil our Network Management Duty and how we intend to continue to improve highway network performance.

The main objectives of the Plan are to reduce journey times and to reduce journey time variability. These objectives are supported by a series of outcomes;

- Reduced congestion;
- Better control of street works and incident management;
- Target route specific priorities; and
- Better value for money.

James Cevis

The Plan will help us deliver improved economic growth, lower carbon emissions and enhance people's quality of life across West Yorkshire.

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 Network 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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1	03-10-2012	DOCUMENT APPROVED BY ITA 27-07-2012

# **Summary**

The Network Management Plan (NMP) sets out the West Yorkshire Local Transport Plan (WYLTP) Partnership's direction and approach to ensure effective management of the transport network.

The Traffic Management Act 2004 was introduced to augment powers of local authorities under which they maintain and improve their highway network. It imposes the Network Management Duty, which requires local traffic authorities to do all that is reasonably practical to manage the network effectively to keep traffic moving.



The Plan has been prepared by the five West

Yorkshire local authorities of Bradford, Calderdale, Kirklees, Leeds and Wakefield, in conjunction with Metro, the Integrated Transport Authority.

The Plan has been prepared to enable West Yorkshire residents, transport users, public transport operators and local businesses to see how we will fulfil our Network Management Duty and how we intend to continue to improve highway network performance.

The main objectives of the Plan are to reduce journey times, specifically bus journey times and to reduce journey time variability. A series of outcomes have also been established to support these objectives:

- Reduced congestion;
- Better control of street works and incident management;
- Target route specific priorities; and
- Better value for money.

A number of strategic approaches have been established to help achieve these outcomes:

- Implement the Yorkshire Common Permit Scheme on qualifying parts of the road network;
- · Smarter planning of road and street works;
- Investigate the potential for the further extension of shared services across West Yorkshire;
- Development of a real time travel database for West Yorkshire.

The Plan complements the existing manuals and framework guides and is intended as a strategic document, whereas the manuals and frameworks provide the detailed technical requirements.

The Plan supports the West Yorkshire My Journey LTP3 2011-26 and sets out how good network management contributes towards the three key objectives of LTP3 in supporting economic growth, promoting low carbon and enhancing people's quality of life.

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# 1. Introduction

# 1.1 West Yorkshire Local Transport Plan Partnership

The Network Management Plan has been prepared by the five West Yorkshire District Councils of Bradford, Calderdale, Kirklees, Leeds and Wakefield, in conjunction with Metro. These authorities make up the West Yorkshire Local Transport Plan (WYLTP) Partnership. The Plan sets out the WYLTP Partnership's direction and approach to ensure effective management of the transport network.

# 1.2 Policy Context

Highways and footways are one part of the transport network, and enable people and goods to move around. There are many definitions of the highway but for the purposes of this Plan, the highway refers to the carriageway and footway network, including elements such as streetlighting, for example. The primary focus of this Plan is the management of the highway network to ensure the free flow of goods and people and to meet the requirements of the Traffic Management Act 2004. Rail and freight aspects are covered in separate plans that support the West Yorkshire Local Transport Plan (LTP3).



Network Management focusses on the reduction of disruption and delay on the transport network by identifying causes of delay and implementing various measures to improve effectiveness for all road users.

Network Management is important because delays have a negative impact on the local and regional economy, on air quality and carbon emissions, and on the quality of life of transport users and the citizens of West Yorkshire.

The Traffic Management Act 2004 was introduced to augment powers of local authorities to maintain and improve their highway network. It imposes the Network Management Duty, which requires local traffic authorities to do all that is reasonably practical to manage the network effectively to keep traffic moving. For the purposes of this document, 'traffic' encompasses both vehicles and pedestrians; this aligns with the definition used in the Network Management Duty guidance.

The Plan has been prepared to enable West Yorkshire residents, transport users, public transport operators and local businesses to see how we will fulfil our Network Management Duty

and how we intend to continue to improve highway network performance. We will use the Plan to support our investment decisions and for securing additional funding sources. This Plan should be read in conjunction with the West Yorkshire LTP3 and other supporting documents to LTP3.

# 2. Vision

### 2.1 Vision Statement

The Plan supports the West Yorkshire My Journey LTP3 2011-26 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

The Network Management Plan sets out how good network management contributes towards the three key objectives of LTP3 of supporting economic growth, promoting low carbon and enhancing people's quality of life. In line with LTP3, the approach for the first three years is to focus on supporting economic growth.

1	Economy. To improve connectivity to support economic activity and growth in 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.

# 2.3 Our Strategic Approach

A key focus of LTP3 is to get more out of the existing transport system through better network management, and to help make journeys for people and goods run more smoothly.

Six 'big ideas' are identified in LTP3 to transform the way people travel around West Yorkshire; 'A New Approach to Network Management' is identified as one of these six implementation



priorities. Network Management is also prioritised in LTP3 as Strategy Proposal 4:

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### **Proposal 4**

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

The measures included in LTP3 will ensure that the transport infrastructure is sufficiently maintained and will improve the management of maintenance, such as road works and other disruptions to journeys. We also plan a greater use of technology to monitor and respond to incidents across the whole of West Yorkshire in real time. Systems such as 'traffic light priority' will also be expanded to speed up the flow of buses. Bringing a focus to the importance of network management will help to ensure that the existing transport assets and networks are used as efficiently and effectively as possible by getting the most out of what we have.

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# 3. Evidence and Issues

### 3.1 The Current Situation

Congestion across West Yorkshire is increasing with longer durations of peak congestion times, particularly on key major routes. Car usage is very high with the percentage of the morning peak trips entering Bradford (72%), Halifax (68%) and Wakefield (76%) exceeding the national average (66%). Leeds has 56% and Huddersfield has 54%. This congestion may have a negative impact on bus journey time reliability and bus punctuality and these have been raised as concerns by passengers.

One third of serious congestion can be caused by road works and street works resulting in increasing costs to businesses and freight transport.

Traffic volumes have slightly fallen from peak pre-recession levels, but congestion still costs the local economy £250m additional costs per year. Over a quarter of the West Yorkshire's road network is operating at less than 50% of the speed limit.



Works on the highway are necessary to improve and maintain our transport network, but are a major source of delay.

There are about 1130 road closures per year across West Yorkshire, resulting in an average of 27 roads closed every day of the year.

The cost of delay to vehicular traffic caused by street and road works on the major road network is almost £150million per year in West Yorkshire.

Road traffic congestion also has a major impact on quality of life for local people in West Yorkshire. Air quality does not meet European standards in some parts of West Yorkshire with 26 Air Quality Management Areas exceeding either annual nitrogen dioxide limits or daily PM<sub>10</sub><sup>1</sup> standards due to road traffic emissions.

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<sup>&</sup>lt;sup>1</sup> PM<sub>10</sub> refers to particle matter measuring 10 micrometres or less and can be particularly damaging to health due to the ability to penetrate to the deepest part of the lungs.

# 3.2 Traffic Management Act 2004

West Yorkshire authorities have long understood the need to reduce disruption and manage congestion on the road network. Congestion and disruption both cause delays to traffic; congestion is caused by a lack of capacity of the network, whilst disruption is caused by a specific event or incident. We need to identify the cause of the delay and then implement various measures to improve the effectiveness of the road network for all road users.



The Traffic Management Act (TMA) 2004 was introduced to supplement the powers of local authorities under which they maintain and improve their highway network. A major new duty, the Network Management Duty (NMD) was introduced through the TMA 2004, which requires local highway authorities to do all that is reasonably practical to manage the network effectively and keep traffic moving.

This may be achieved through encouraging more efficient use of the road network and through the reduction of road congestion and the avoidance of disruption. Such measures include:

- Optimising the use of the existing road space through traffic management, regulation and enforcement and Urban Traffic Management and Control (UTMC) measures;
- Encouraging modal shift to public transport, walking and cycling;
- Manage demand for travel including promotion of land use policies and practices to reduce the need to travel;
- Effective and efficient management of road works, events and other potential sources of delay and disruption on the road network; and
- Providing information to enable more informed travel choices.

# CASE STUDY Bus Journey Time Variability

Bus journey time variability is an issue in West Yorkshire and has an impact on service users. A study by Metro determined that for one bus service starting at 7:30am, the scheduled journey time was 40 minutes, but the actual journey time was up to 70 minutes on some days, when road works were in progress on the route. The journey time of another service starting at 5:10pm varied between 15 minutes and 40 minutes on different days.

Bus companies are limited in what they can do to respond to delays in scheduled services, which will not increase costs or reduce the level of service to their customers.

The West Yorkshire district authorities currently undertake a coordination role which involves collating the major works programmes from all work promoters, such as utility companies and developers. Locations or times when clashes could occur are identified and opportunities for changing programmes or collaborative working are established. This has the potential benefit of reducing the overall delays and disruption experienced by drivers and local people.

# 3.3 Key Issues

The Network Management Duty guidance and subsequent Intervention Criteria (which could be used if an authority is not seen to be effectively carrying out the Network Management Duty), have been used to help identify the major issues in delivering the Network Management Duty in West Yorkshire. The five main issues are set out below.

### Considering the needs of all road users

Road users are all those that travel on the highway network and include pedestrians, drivers, cyclists, motorcyclists and their passengers. The needs of all road users are considered to ensure that there is a clear understanding of the problems that they face on different parts of the network. It is however important to ensure that competing demands of road users, operators of the transport service, the community, organisations and residents are balanced whilst continuing to manage the network efficiently.

The West Yorkshire LTP Partnership recognises the need for a balanced approach in delivering the Network Management Duty. For example, utility companies provide important services to support the growth of the economy and maintain quality of life for residents and business users, and the disruption that their works causes needs to be balanced against this need. Often accommodating the needs of vulnerable people and providing sustainable solutions can cause increased delays therefore, a careful, balanced approach which suits the particular characteristics of each location is required when assessing activities or projects which

### CASE STUDY Impact of Congestion on Small Businesses

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.

affect the highway network.

Schemes identified in the Implementation Plan will be progressed in line with the key transport route networks and 'consideration of users' toolkit in LTP3. This toolkit has been developed to reflect the different and often conflicting needs of transport users and the varying levels of importance of the network. This will help guide the prioritisation of investment decisions in support of the Vision and Objectives of LTP3, and clarifies how the competing needs of different user groups should be addressed within scheme design.

A key aim of the LTP3 is to encourage greater use of public transport and hence the network management plan needs to address the impact on buses and journey variability of the transport system.

### Coordinating and planning works and known events

Congestion and disruption on the highway infrastructure is a major area of concern for businesses and the public. The co-ordination and planning of works and known events is undertaken in order to:

- Reduce disruption and maintain the optimum throughput from the existing network;
- Support the local economy by minimising disruption to industry and business;
- Reduce greenhouse gas emissions by minimising the numbers of standing vehicles;
- Enable people and goods to move around as efficiently as possible;
- Ensure journey time reliability is best maintained so that public transport is an attractive travel option; and
- Enable smarter planning of planned road and street works, so that these can be completed in a shorter amount of time.

# Gathering information and providing information needs

It is critical to maintain a high level of journey time reliability to enable people to make timely and flexible travel choices that fit with their personal lifestyles. Effective arrangements must therefore be in place to gather timely and accurate information about planned works and events, and to make this information available to road users in a way that is convenient, understandable, accurate and up-to-date. Without such information, users are unable to make informed choices about their travel arrangements. It is increasingly

# CASE STUDY Winter Maintenance

The previous two winters have been the coldest for 30 years, causing problems for all modes including public transport. The LTP Partnership work together with the Highways Agency and other authorities to prepare winter maintenance plans.

Gritting arrangements for public transport facilities include the majority of bus routes, bus stations and footways in the central areas of cities and towns. Some sections of service bus and school bus routes are not included as these have been assessed as either too narrow or unsuitable for the gritting vehicle.

Each District Council maintains detailed street- by- street information of their winter maintenance schedules and is available on-line.

necessary to make this information available on websites, social networking forums and via text messaging to enable people to access this both before and during their journey.

### Incident management and contingency planning

By definition, emergency situations and accidents are unplanned events. Although they cannot be predicted or foreseen, contingency plans can be prepared to minimise the resultant disruption and safety implications. Other measures can also be taken to reduce the number of unplanned events that occur. Unplanned events include such things as road traffic collisions, vehicle breakdowns, spillages, defects such as landslips, burst service mains, adverse weather and security alerts.

Incident management and contingency planning is undertaken to:

- Ensure that safety is not compromised by unplanned events on the network;
- Minimise the impact of unforeseen incidents on all transport users, by returning the affected transport networks to normal as soon as possible;
- Ensure that all parties involved in the management of unplanned events deliver a coordinated approach;
- Develop resilience to ensure that the existing network can be used to its full capacity, reducing the demands on other less suitable routes, both in the natural and built environments.

### Dealing with traffic growth

Over the past 10 years monitoring has indicated a slight reduction in traffic volumes across West Yorkshire, from a peak level in the mid-2000s. Much of this reduction can be attributed to the recent economic downturn. Network Management practices have continued to alleviate the effects of congestion and disruption, but clearly this will become an increasing challenge when the economic downturn is reversed. The West Yorkshire LTP Partnership recognises the need to both support economic growth, and to be prepared for the impact this will have on the highway network. Traffic growth puts a strain on the urban network of metropolitan conurbations in particular and hence continued actions and initiatives are required to prepare for the economic upturn and to limit the growth in traffic volumes resulting from it. These measures will primarily focus on:

- Monitoring trends in the growth of traffic throughout West Yorkshire;
- Identifying appropriate actions, consistent with the West Yorkshire LTP3;
- Implementing initiatives and schemes which support sustainable travel.

#### **Additional Issues**

In addition to the five main issues identified above, a number of supplementary issues are important to the delivery of the Network Management Plan:

#### Working with all Stakeholders

Stakeholders (see below) need to be involved in Network Management so that:

- Traffic Managers within the authorities who have responsibility for exercising power to regulate or coordinate the use of the road network are aware of, and act upon, the responsibilities arising from the Network Management Duty;
- All relevant organisations are aware of the duty and their impact on the movement of traffic:
- Authorities take action that includes consultation on initiatives, the sharing of information needed to meet the duty, processes for ensuring that policies are consistent and agreeing joint working arrangements.

The key stakeholders include: Utility companies and statutory undertakers (including the Yorkshire Highway Authority and Utilities Committee (YHAUC)), the Yorkshire Joint Authorities Group (YJAG), Yorkshire and Humberside Traffic Managers Group (YHTMG), the police, Metro, bus operators, the Traffic Commissioners, the Highways Agency, neighbouring authorities, residents, special interest groups, local businesses and different road users.

### **Ensuring Parity with Others**

This refers to the equitable treatment of all works and activities on the highway and of all those individuals and organisations involved in the process. Parity is an important principle in exercising the Network Management Duty of TMA and all West Yorkshire Highway Authorities are fully committed to applying equal and consistent standards and approaches to all works and activities on the highway. This provides benefits in the form of improved confidence for all users, so that best informed decisions on travel choice in the form of journey mode and route can be made across the region. This can benefit the economy of West Yorkshire and the quality of life of its residents.

### **Exercising Powers in Support of the Network Management Duty**

Powers contained within the various pieces of legislation covering activities in the highway are fully utilised to foresee and prevent unnecessary congestion or disruption to highway users, thereby maintaining consistent journey times.

# 4. Strategy

# 4.1 Network Management Plan Strategy

#### **Outcomes**

The Network Management Plan has been developed to support and contribute to the overarching LTP3 MyJourney objectives – economic growth, low carbon and improving quality of life. A set of specific outcomes have been developed which the Plan will aim to achieve. These include:

- Reduced congestion;
- Better control of street works and incident management;
- Reduced journey times, specifically reduced bus journey times;
- Reduce the cost of disruption and congestion;
- Increase journey time reliability;
- Encourage mode shift to more sustainable modes of travel;
- Target route specific priorities;
- Better value for money.

### **Strategic Approaches**

A series of strategic approaches have been developed for this Network Management Plan:

- Implement the Yorkshire Common Permit Scheme on qualifying parts of the road network;
- Smarter planning of road and street works, so that these can be completed in a shorter amount of time. This will include investigation of the potential to utilise the Department for Transport's (DfT) 'lane rental' scheme whereby councils are able to charge utility companies for their work on the busiest roads, during peak times. This will incentivise utility firms to carry out their works more quickly and at times when roads are quieter and will hence reduce disruption;
- Investigate the potential for the further extension of shared services across West Yorkshire to increase efficiency;
- Development of a real time travel database for West Yorkshire to provide online information to transport network users and to inform efficient network management.

A detailed Implementation Plan with specific actions and targets is included in Chapter 5.

# **5** Implementation

# 5.1 Funding

A range of capital and revenue funding is made available within the West Yorkshire LTP Partnership for Network Management over the first Implementation Plan period 2011-14. The main sources of funding are:

- LTP Integrated Transport Block a capital grant provided by central Government to the ITA:
- LTP Highways Maintenance Block a capital grant provided by central Government to the ITA;
- Authority Revenue Budgets West Yorkshire District Councils and Metro allocate some of their local revenue funding for network management.

The ITA reviews the appropriate capital funding allocations every 3 months across all the LTP3 programme areas, including those allocations required for Network Management purposes and the delivery of the Network Management Implementation Plan.

# 5.2 Implementation Plan

The following Implementation Plan sets out the detailed proposals for period to 2014. The Plan is in two sections:

- Specific actions are identified for implementation and where applicable, an associated target or success measure has been included to ensure we have a quantitative measure of our progress;
- Series of ongoing network management practices, which will continue to be progressed to ensure best practice.

# 5.3 Ongoing programmes which support the network management plan

The network management plan is supported by many on-going initiatives and programmes including:

 Enhanced public transport - The introduction and on-going support of public transport including FreeTownBuses and FreeCityBus service, investment in bus fleets, enhancements to bus stations and modernising the shelter network as well as the rolling out of real-time bus and rail information.

- Improved road safety There is a continuing whole community approach to improving road safety, including improvements to local roads, road user training initiatives, safety cameras and enforcement linked to local conditions to support road users in making safer and sustainable journeys.
- Transport assets Programmes of maintenance and improvements are on-going with further initiatives set out in the transport asset management plan.'

Action #	Action 2011 to 2014	Success measure / Outcome/Target
1.1	Review and implement measures to address top 15 Congestion Hot Spots, incorporating new locations as appropriate:  1. Armley Gyratory (Leeds) 2. Chantry House Roundabout (Wakefield) 3. A58 Stump Cross, (Calderdale) 4. A6120 ORR / A61 Moortown, (Leeds) 5. A629 Ainley Top (Calderdale) 6. A6110 /A62 Gelderd Rd, (Leeds) 7. A650 Hard Ings/ A6035 Bradford Rd/B6265 Bradford Rd (Bradford) 8. A62 / Bradley Road / Colne Bridge Road (Kirklees) 9. A629 Salterhebble — junction with Wakefield Rd, Stainland Rd (Calderdale) 10. A6120 ORR / B6159 (Leeds) 11. A6110 / A58 Whitehall Rd (Leeds) 12. A660 Otley Rd / Shaw Lane (Leeds) 13. Bethal St / A641 Huddersfield Rd (Calderdale) 14. A629 / Wakefield Rd / Waterloo (Kirklees)	Improved journey time reliability at the top 15 congestion hot spot locations.
1.2	Utilisation of the LTP3 Key Route Networks as a tool to identify priorities for traffic management issues and future network investment.	Integration of the Key Route Networks into the preparation of schemes.
1.3	Development of a system of 'paired routes' so that primary routes are kept free of disruptive road and street works when disruptive works are in progress on an alternative route.	Development of the paired routes on key routes by December 2013.
1.4	Review the Traffic Sensitive Route Network designations in accordance with the TMA 2008 guidance	Traffic Sensitive designations reviewed and National Street Gazetteer updated every 3 years.
1.5	Implement the Yorkshire Common Permit Scheme.	Tranche 1 in operation by June 2012.  Tranche 2 in operation by December 2012.  Conditions applied to emergency permit applications

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		to minimise disruption
1.6	Implementation of a Real Time Information database.	Database to be implemented by March 2014. Future delays minimised through better informed transport users.
1.7	Complete Traffic Light Priority (TLP) scheme to improve bus journey times and reliability. This scheme involves giving additional priority (green light time) through signalled junctions and crossings to buses, using GPS based bus tracking.	Completion of 195 sites across West Yorkshire by the end of 2012/13.  Reduced journey times and increased reliability for buses and Benefit/Cost Ratio (BCR) > 2.0.
1.8	Improved liaison with the police to ensure efficient diversion of traffic and clearing of debris following a road accident or other temporary obstruction.	Re-launch initiative to improve liaison with the police.
1.9	Investigation of the potential to utilise the Department for Transport's (DfT) 'lane rental' scheme whereby councils are able to charge utility companies for their work on the busiest roads, during peak times. This will incentivise utility firms to carry out their works more quickly and at times when roads are quieter and will hence reduce disruption.	Review to be carried out following the DfT's Pilot Schemes.
1.10	Development of a joint protocol within West Yorkshire for emergency diversion routes in the event of a major incident leading to a closure of the motorways within WY. The agreed emergency diversion routes for motorways will continue to be reviewed with the Highways Agency.	Effective protocol and emergency diversion routes in place.
1.11	Collation of work programmes across West Yorkshire to ensure better longer term forward planning and identification of work, to maximise the opportunities for rationalising work.	TBC by March 2013
2.1	An on-going programme of local schemes and initiatives will be developed and promoted to provide cost effective congestion reduction and improvement in bus patronage.	Schemes programmed and delivered. Measurable reduction in congestion and improvement in bus patronage.
2.2	Identify regular events and have plans in place to best co-ordinate and manage.	List of regular major events and accompanying traffic management plans publicised.
2.3	Hold de-brief sessions after major incidents to identify where future improvements can be made.	Future plans to be improved and future disruption minimised.

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2.4	Reduce the disruptive impact of adverse weather conditions through adherence to district Winter Service Plans, monitoring of targeted flood hot spots and liaison with Police, highways and forestry services in the event of high wind reports.	Subject to annual review.
2.5	Development of a strategic West Yorkshire approach to road space reallocation across all modes to encourage modal shift (including bus lanes, HOV lanes, cycle lanes). No car lanes will also be considered in certain locations whilst continuing to provide a positive benefit to bus journey times.	TBC by March 2013
2.6	Active enforcement of parking restrictions to help reduce the number of parked vehicles that may be causing a traffic disruption. Improved parking enforcement (through Civil Parking Enforcement powers).	TBC by March 2013
2.7	Promote awareness of Network Management Duty amongst appropriate stakeholders to ensure they are kept abreast of continuing developments.	TBC by March 2013
2.8	Continued to work collaboratively with Urban Traffic Management and Control teams, such as through the traffic light priority programme, to improve efficiencies and deliver improvements.	TBC by March 2013

# 6. Project and Performance Management

### 6.1 Data Collection

Traffic flow data is collected at over 450 sites across West Yorkshire, as part of the Long Term Monitoring Programme. Data is collected on a 4-year rolling programme at locations across West Yorkshire based on a series of screen lines and cordons around the main centres and administrative boundaries.

The traffic flow data is based on a sample of 89 roads in West Yorkshire, which measure 16-hour two-way weekday traffic flows. Over the past 10 years, the programme of monitoring the 89 roads has indicated a slight reduction in traffic volumes across West Yorkshire, from a peak level in the mid-2000s. Traffic growth reports are produced annually using a mixture of sources with a more comprehensive study undertaken every two years.



This information is supplemented by ITIS (a system which provide high quality travel and congestion information) data and in the future the use of CJAMS (Congestion and Journey-time Acquisition and Monitoring System). This data provides the LTP Partnership with a method to continuously monitor traffic speeds across the network and identify congestion hotspots.

In addition to absolute volumes, transport mode split is recognised as a key indicator of the impact of the Network Management Plan and LTP3 measures. Mode split counts are undertaken annually in the main centres across West Yorkshire over 4 days for the morning peak period (0730-0930), inbound to the town/city centres. These surveys record people travelling in private vehicles, on foot, by bicycle and by bus. Rail patronage data is also collected. Analysis of these data shows little change in the mode share of morning peak period car travel over recent years.

From 2005 to 2010, congestion was also monitored annually on behalf of the DfT on 13 routes in West Yorkshire as part of the requirements for tackling congestion in metropolitan urban areas, being measured in terms of the average journey time per person per mile. Local monitoring is also undertaken.

# **6.2 Monitoring Framework**

The Network Management Plan has been developed to support and contribute to the overarching LTP3 MyJourney objectives – economic growth, low carbon and increasing quality of life. A framework for monitoring has been established and is set out in the LTP3.

A series of specific outcomes have been developed which the Network Management Plan will aim to achieve. These include:

- Reduced congestion;
- Better control of street works and incident management;
- Reduced journey times, specifically reduced bus journey times;
- Reduce the cost of disruption and congestion;
- Increase journey time reliability;
- Encourage mode shift to more sustainable modes of travel;
- Target route specific priorities;
- Better value for money.

Evidence will be provided to demonstrate the progression of the Plan in line with the targets, success measures and anticipated outcomes. These are detailed in the Implementation Plan in Chapter 5. This process will ensure that the LTP Partnership carry out their responsibilities in line with the Network Management Duty.

The Network Management Plan and its outcomes will be reviewed annually to ensure progression towards the outputs and targets is on track and to ensure that the Implementation Plan remains relevant and appropriate.

# **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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