



WEST YORKSHIRE TRANSPORT STRATEGY

2016-2036

FULL CONSULTATION DRAFT

















Contents

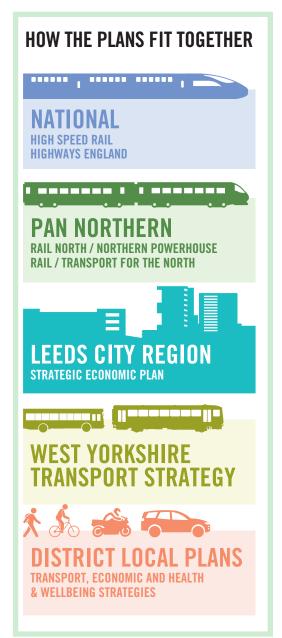
- 1. Introduction
- 2. Transport Strategy Vision and Objectives
- 3. Challenges, Opportunities, Places
 - Our Transport Challenges
 - Our Travel Characteristics
 - Our Growth Proposals
 - Our Places
- 4. Our Spatial themes
 - Transformed National connectivity
 - Transformed connectivity across the North
 - Transformed connectivity in the City Region
- 5. Our Policies:
 - Road Network
 - Places to Live and Work
 - One System Public Transport
 - Smart Futures
 - Asset Management and Resilience
 - Cross Cutting: Environment, Health and Well-being, Inclusion
- 6. Funding the Strategy
- 7. Implementing the Strategy
- 8. Consultation

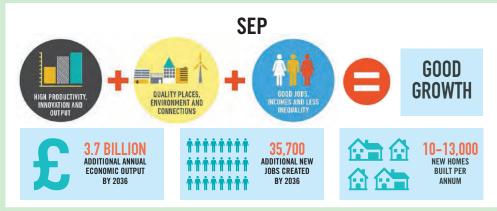
This draft West Yorkshire Transport Strategy has been prepared for public consultation running from Monday 18 July 2016 to 21 October 2016. The Strategy will be updated to reflect the comments received and then adopted by the West Yorkshire Combined Authority (WYCA) in late 2016.

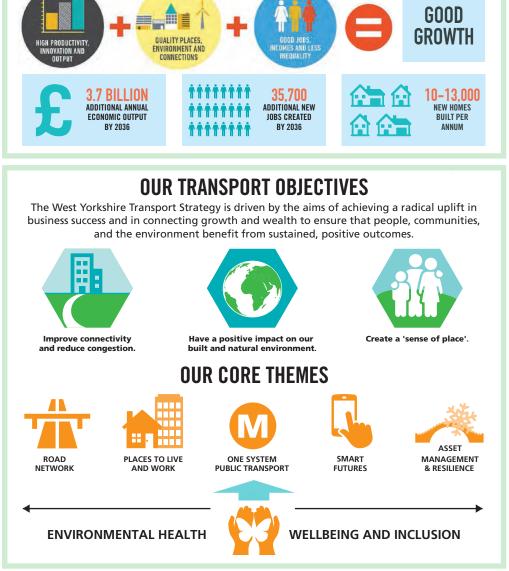
This draft strategy has been produced by WYCA and the West Yorkshire District Councils - Bradford, Calderdale, Kirklees, Leeds and Wakefield. WYCA was established in 2014 to bring together strategic economic development and transport functions across West Yorkshire in a more effective way.

WYCA has a statutory duty to produce and maintain a Local Transport Plan (LTP) for West Yorkshire. This document will replace the existing West Yorkshire LTP published in 2011. The working title for the new strategy was originally the 'Single Transport Plan' (STP). Initial consultation carried out in 2015 on the STP has informed the approach set out in this document.

West Yorkshire Transport Strategy 2016 - 2036









MORE TRIPS MADE BY BUS MADE

West Yorkshire Transport Strategy 2016 – 2036

1. Introduction

This strategy sets out a vision and a framework to deliver a high-class, modern, integrated transport system.

The strategy covers the geography of West Yorkshire but recognises the importance of the wider Leeds City Region, and that people and goods travel longer distances across administrative boundaries.

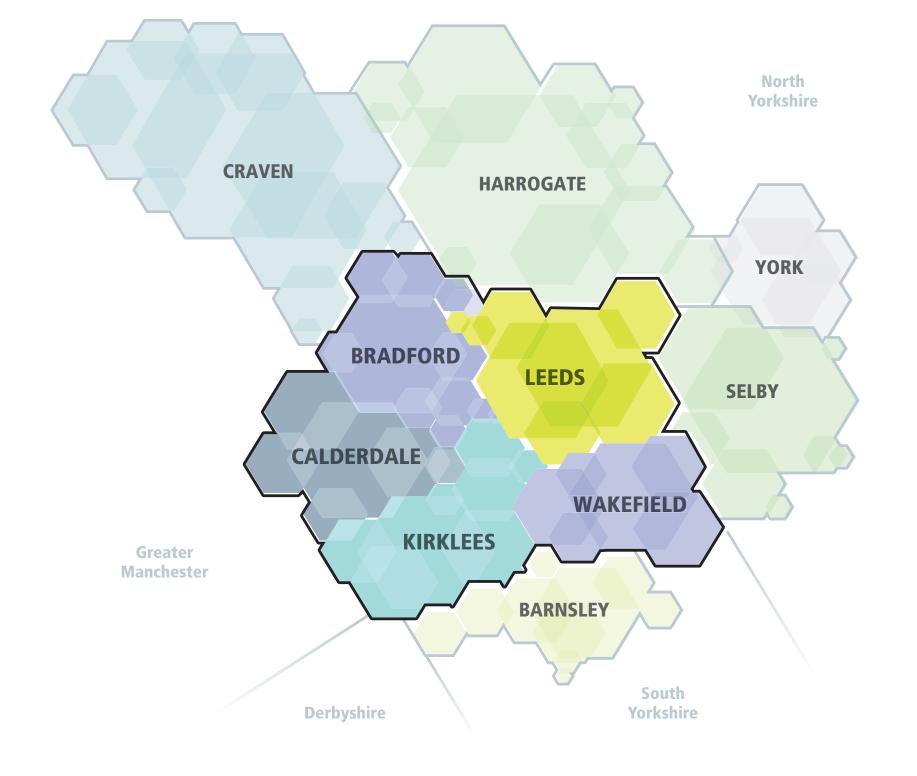
Development of the West Yorkshire Transport Strategy is led by the West Yorkshire Combined Authority, but it has been produced through engagement with many partners and stakeholders. Where 'we' is used in the strategy it refers to the Combined Authority, the five West Yorkshire Local Authorities and the Leeds City Region Local Enterprise Partnership (LEP) working with other organisations to bring transformational change to our transport system.

The strategy supports work at the national, pan northern, regional and local levels to create a northern economic powerhouse that delivers jobs and prosperity. The Leeds City Region is the largest UK economy outside of London, and is critical to the North's and the nation's success, but productivity and the attractiveness of our places for business must improve to compete in a global economy.

A good transport system, connecting people to jobs, bringing businesses closer together, getting goods to markets, providing opportunities for education and training, and reducing social exclusion, is a vital requirement of a competitive economy. However current levels of traffic on our roads and the impacts of this traffic are a concern for the health of our economy and for our communities. Furthermore increasing demand for travel is likely to be characterised by longer distance, more dispersed commuting and business trips.

This strategy aims to put in place the right transport conditions to grow the economy, and meet the demand for travel in a sustainable way.

The size and diversity of West Yorkshire with its many retail centres, business areas, former mining and textile communities, market towns and extensive rural area is a strength, but it also presents challenges in balancing needs and funding transport improvements. By aligning transport spending with the plans of our public and private sector partners, neighbouring city regions and with government, we believe the impact of our investment for transport and the economy can be maximised for all our communities.



Delivering the Strategic Economic Plan (SEP) 2016-2036

The West Yorkshire Transport Strategy provides the transport policies and strategies to help deliver the Leeds City Region Strategic Economic Plan (SEP).

Adopted in 2016 by the Local Enterprise Partnership (LEP) and West Yorkshire Combined Authority, the SEP details how the LEP and the Combined Authority will work with businesses, the public sector and voluntary and community organisations to develop the economy.

The SEP vision is of 'good growth' where business competitiveness, productivity and profits go hand in hand with access to good jobs, earnings and opportunities for all residents and where the environmental and people's health are highly valued.

The SEP will achieve good growth through investing in four strategic policy areas:

- Priority 1 Growing Business
- Priority 2 Skilled People, better jobs
- Priority 3 Clean Energy and environmental Resilience
- Priority 4 Infrastructure for Growth

The SEP identifies improvements in transport connectivity cutting across all four strategic priorities, with particular emphasis on Priority 4 - where the SEP sets out its requirements for an integrated, accessible transport system, including investment in transport infrastructure and services, to support the growth and regeneration of prioritised areas within the city region.

You can find out about the SEP by visiting the Local Enterprise Partnership's website at: www.the-lep.com



Our economic challenge

West Yorkshire is a significant conurbation within the Leeds city region and north of England. It is home to 2.3 million people including 1.5 million of working age, and the area hosts 90,000 businesses and over a million jobs. The West Yorkshire economy has a GVA of £47bn, some 15% of the total output of the north. The area has significant potential, but in common with much of the north of England, levels of productivity and incomes are lower than elsewhere in the country, while unemployment and deprivation are higher than elsewhere.

The SEP is seeking to improve the economic performance of our cities and towns, reinvigorate population centres and address long standing issues on skills, deprivation and health, as well as continuing to reduce carbon emissions.

While the economic performance of the city region has lagged behind national levels – especially since the 2008/09 recession – the area has still seen growth in people, businesses and output created. In the past 10 years the population of the area has grown by 140,000 people, created 11,000 more businesses and seen GVA grow by over £12bn.

Future forecasts all suggest further growth. The SEP has set targets for jobs and housing to be created within the City Region, which will:

- Create an additional 37,500 jobs by 2036, over the 115,000 jobs which would be expected to be created in that period
- Create 10,000 13,000 new houses per year across the city region

In addition, the recent Northern Powerhouse Independent Economic Review set out a number of aspirational growth scenarios for the North. Their modelling suggested that by 2050, under a 'transformational' scenario, the absolute level of GVA in the North is projected to be some 15% higher than a 'business as usual' projection – equating to £97bn higher (in 2015 prices) in the 'transformational' scenario than in the business as usual case. Furthermore, by 2050, some 850,000 additional jobs are projected in the North under the 'transformational' scenario compared with 'business as usual', and 1.56m more than in 2015.

These figures would translate into potentially 15,000 extra jobs in the Leeds City Region by 2050. The majority of this local growth is forecast to be in the West Yorkshire districts. All of this suggests an ongoing challenge to continue to increase and upgrade the transport system to further support this growth and enhance the conurbations offer to businesses and people to both locate and remain here.

2. Transport Strategy - Vision and Objectives

Our Vision

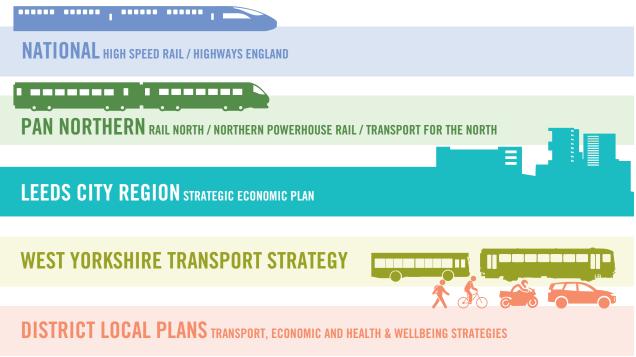
Travel around West Yorkshire in 2036 will be easy and reliable, using a modern, well-connected transport network that enhances business success and people's lives.

We want a transport system that supports good growth, serving the needs of business and people, enhancing prosperity, health and wellbeing for people and places across West Yorkshire.

Efficient motorways, High Speed Rail, fast East-West rail connections across the north of England and better access to international gateways will ensure that our physical links to the rest of the UK and the world match or exceed other comparable city regions. But to realise our economic ambitions we also need transformational change in our transport system at a West Yorkshire and local level.

The Transport Strategy provides the policy framework for the planning and delivery of improved transport infrastructure and services in West Yorkshire, to support the Strategic Economic Plan and West Yorkshire District Local Plans, and to influence investment decisions being made at the pan-northern and national levels.

How our transport plans fit together



Our Transport Objectives

The West Yorkshire Transport Strategy is driven by the aims of achieving a radical uplift in business success and in connecting growth and wealth to ensure that people, communities, and the environment benefit from sustained, positive outcomes.

The Transport Strategy's vision is accompanied by the following objectives:



Improve connectivity and reduce congestion - thereby increasing business productivity and providing access to wider labour markets



Have a positive impact on our built and natural environment increasing longer term resilience against climate change



Create a 'sense of place' - encouraging walking and cycling for health and other benefits and increasing access in a safe way

The strategy has been developed with the West Yorkshire District Councils, and informed by an initial consultation held with stakeholders and the public in 2015.

Feedback from consultation told us that our focus on the economy, and the approach described in a number of core themes was well received, but people wanted to see greater ambition with the better integration of all forms of transport as a vital early step in improving transport. There were also expectations for transport to make a positive contribution to the environment, to combat poor air quality and tackle climate change, and in addressing the economic and health inequalities in our communities, with transport for young and elderly people and in rural areas identified as important issues.

The Transport Strategy is not just focussed on delivering a number of large scale transport schemes. Our ambition is in the objectives that we have and the outcomes that we want to achieve.

We have identified some targets for the first 10 years of the strategy, to grow the number of journeys made by using sustainable transport:

- 25% more trips made by bus made by 2026
- 50% more trips made by rail in this region by 2026
- 100% more trips made by bicycle

We propose to include more targets for the whole period of the strategy, which will be tailored to suit the particular circumstances and options on offer in a particular place.

We are using this current consultation on the Transport Strategy, taking place during July to October, to seek views from the public and stakeholders on the types of indicators that should be used to measure our performance in delivering the strategy.

3. Challenges

West Yorkshire is well located to deliver better transport connectivity to support economic growth across the City Region. We are at the crossroads of London, Edinburgh, Liverpool and Hull, on the main national road and rail networks, linked north-south by the M1 and East Coast Mainline and east-west by the M62 and Trans Pennine Rail. We are potentially within an hour's drive-time of 7 million people, and can reach Manchester, Sheffield and Hull with direct rail connections.

The West Yorkshire transport system already supports high volumes of passenger and freight movement – but consultation and the analysis of available evidence shows there are challenges facing transport, which we need to address. Fundamentally, our transport system is under pressure. Investment in road and rail has not kept pace with economic and population growth, resulting in congestion and delays on our roads, a lack of seats on public transport, and a lack of resilience in these networks and alternative options when things go wrong – these transport restrictions could limit the ambitions for growth contained in the Strategic Economic Plan and our District Local Plans.

And the future presents further challenges. We will have an older population with higher levels of disability which will create new and different demands for travel, and research by Leeds University Institute of Transport Studies¹ and the Urban Transport Group² has identified some key social and technological trends that are likely to impact on the demand for travel by younger people in the future. Among these trends are lower levels of car ownership, participation in the share economy and greater use of smart technology. These considerations, taken together with an energy revolution, mean we must not plan on yesterday's assumptions and should prepare for a more flexible and technology-assisted future.



¹ Leeds University Institute of Transport Studies, Flexi-Mobility, 2015 2 Urban Transport Group, Horizon Scan, 2015)



Our transport challenges

- **Strategic connectivity** our north south and east west connections to the UK's major cities require significant investment to remain fit for purpose
- **Congestion** on motorway corridors and junctions and routes into our main urban centres, impacting on business costs and the accessibility of labour markets
- **Poor access** by road, rail or bus to many key development sites and gateways including Leeds Bradford Airport, holding back job creation and house building
- Car dominance in town and city centres due to a lack of orbital road capacity to remove through traffic, combined with past prioritisation of car parking in centres
- **Severe crowding on trains** in the busiest periods, with peak period trains to and from Leeds having some of the worst crowding nationally
- Insufficient car parking at rail stations and limited bus park and ride options to our centres
- Bus journeys made slow or unreliable by road congestion and long dwell times at stops because of on-bus payments
- **Climate change** with a slower rate of carbon reduction in the transport sector than in other sectors
- **Poor air quality** and the negative impacts of harmful pollutants produced by traffic linked with a range of illnesses and premature deaths
- Over-reliance on car use contributing to a rise in obesity, diabetes and coronary heart disease
- The safety of our roads with particular concern for walking, cycling and motorcycling

Our travel characteristics

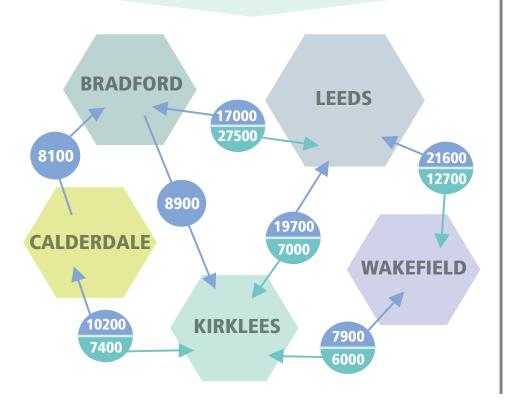
BETWEEN 2001 and 2011, the average distance we travel to work rose by from 11.3km (7 miles) to 12.9km (8 miles)

Cars & vans dominate commuting – around

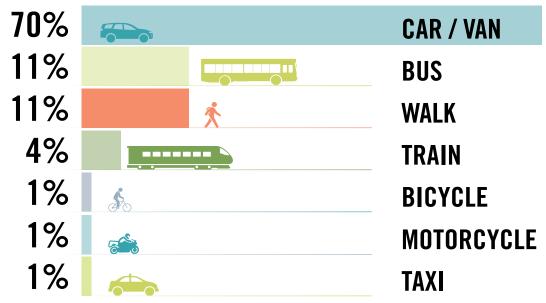
70%

of all travel to work (2011)

Our Districts import and export workers with each other and there have been big increases in commuting from places outside West Yorkshire. Leeds is the largest importer of labour, Kirklees is a major exporter.



WEST YORKSHIRE TRAVEL TO WORK MODE SHARE



FOR COMMUTING TO OUR FIVE MAIN CENTRES THE PROPORTION OF CAR TRIPS IS GENERALLY LOWER (2011)



Cycling represents less than of work related trips in West Yorkshire in 2011, however there has been an increase in the total number of trips since 2001, especially in Leeds which has seen a 49% increase.

49%

increase in the number of cycling work related trips in Leeds since 2001



More people walked to work in 2011 than in 2001 (105,000 vs. 96,000). The highest increases in walking trips to work were in Leeds (over 18%) and Bradford (12%)

18%

increase in the total number of walking trips to work in Leeds



12%

increase in the total number of walking trips to work in Bradford



Freight – 61m tonnes of freight arrive into West Yorkshire annually and we export 54 million tonnes (2010).

93%



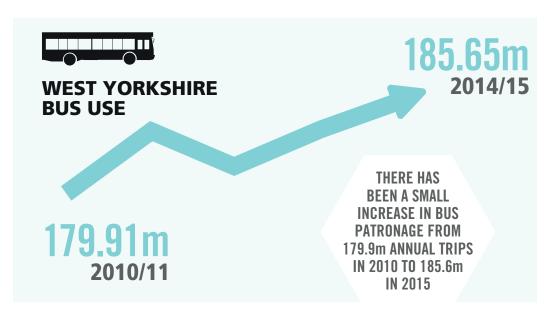
93% OF GOODS ARE TRANSPORTED BY ROAD, ONLY 7% RAIL

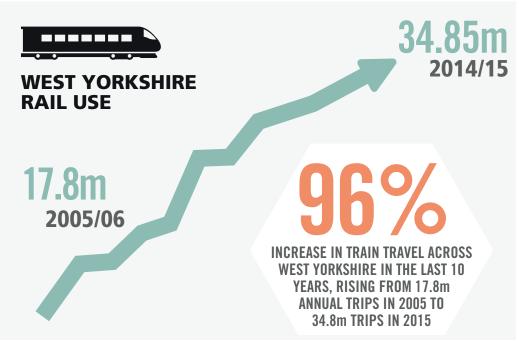
Heavy goods vehicles account for only 5% of vehicles on our roads, but

30-45%



of air pollution from road transport in UK urban areas.





Our growth proposals

Integrating spatial and transport planning

West Yorkshire's population is forecast to grow by 12% from 2015 to 2035, an increase of 280,000 people from 2.2 million to 2.5 million. The Leeds City Region population will grow in the same period from 3 million to 3.4 million.

Through their Local Plans the West Yorkshire District Councils are developing land-use proposals to accommodate this growth. The Local Plans identify the location of land allocations where employment and housing development can take place and the scale of that development.

The Strategic Economic Plan, working from Local Plans, has set targets for jobs and housing to be created within the City Region and has identified Spatial Priority Areas as the focus for jobs and housing delivery. The targets for jobs and housing set out in the SEP are:

- An additional 37,500 jobs by 2036, over the 115,000 jobs which would be expected to be created in that period
- 10,000 13,000 new houses per year across the city region

The SEP Spatial Priority Areas are:

- 7 strategic urban growth centres in the West Yorkshire city and town centres of Bradford, Halifax, Huddersfield, Leeds (including the South Bank) and Wakefield, plus Barnsley and York in the wider City Region
- 6 strategic housing growth areas in Bradford Shipley Canal Road corridor, Castleford Growth Zone, East Leeds Extension, North Kirklees Growth Zone and Wakefield City Fields, plus York Central
- 12 strategic growth areas including mixed use employment sites and Enterprise Zones, mainly on the M1 and M62 corridors in the south of the City Region, and also including Leeds Bradford Airport

The growth in Leeds in particular, in the city centre and Aire Valley, and also from other strategic and local growth priorities, will generate more commuting from across West Yorkshire and the City Region. The challenge will be to ensure this growth can happen in a sustainable way and to mitigate any negative impacts of the extra travel generated by this growth.

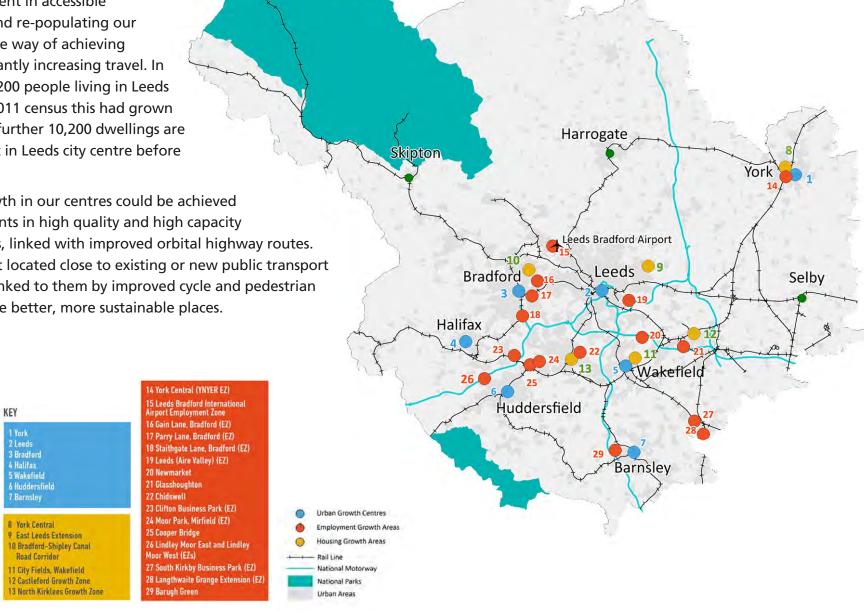
To predict future commuting and business to business travel patterns we have developed a transport, land use and economic forecasting model for the City Region. It takes account of the land use allocations set out in current Local Plans and prioritised in the SEP. The approach of targeting transport investment where it could best support economic growth was used successfully to justify our City Deal proposal for the £1.4bn West Yorkshire plus Transport Fund in 2015. The projections have been used to identify where future problems in the transport network, such as road congestion or overcrowding on the rail network, are likely to constrain economic growth and business to business activity. Further tests and analysis, including understanding the impacts of High Speed Rail, emerging Transport for the North projects and other transport projects and policies, will be carried out to help identify and develop further transport interventions.

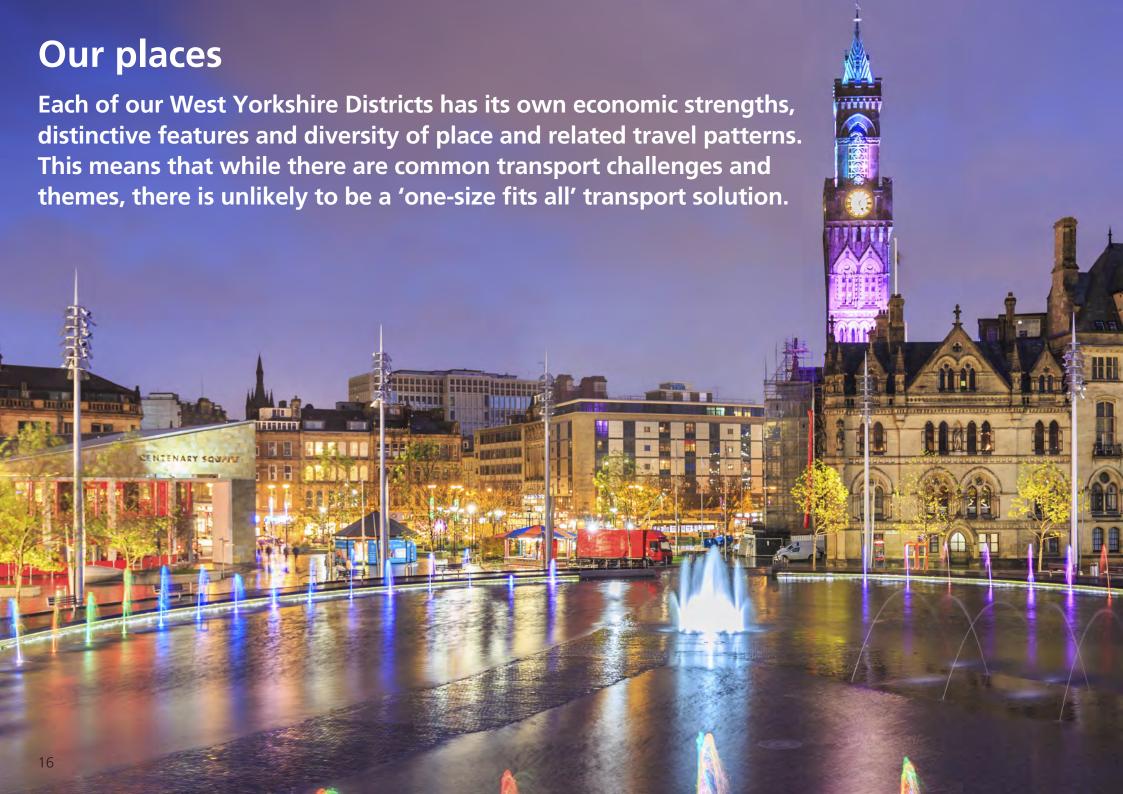
Some new road building will be necessary to relieve congestion hot spots, take traffic away from around town and city centres, and to connect and bring forward development sites. For example, the Aire Valley in Leeds along the M621 would benefit from enhanced highway access to support business activity which is dependent on good, reliable road connections. However, we believe that many of the new trips associated with our economic growth can be made in full or part by sustainable transport, using public transport including rail, bus and new technologies such as Tram-Train, and by cycling and walking, or combinations of these modes.

LEEDS CITY REGION SPATIAL PRIORITY AREAS

Locating new development in accessible locations is important and re-populating our urban centres will be one way of achieving growth without significantly increasing travel. In 2001 there were only 3,200 people living in Leeds city centre, but by the 2011 census this had grown to 13,000 people and a further 10,200 dwellings are now planned to be built in Leeds city centre before 2028.

More employment growth in our centres could be achieved with transport investments in high quality and high capacity public transport projects, linked with improved orbital highway routes. Elsewhere, development located close to existing or new public transport hubs or corridors, and linked to them by improved cycle and pedestrian networks will help create better, more sustainable places.







Bradford

APPERLEY BRIDGE

HOLME WOOD

Bradford is the second largest economy in the City Region and has the fastest growing population. The focus for housing and jobs growth are Bradford city centre and Shipley Canal Road Corridor. There are also opportunities for economic growth as part of urban extensions to the city at Holme Wood and Apperley Bridge/Esholt which will include developments which support the growth of Leeds Bradford Airport as an important economic hub. There will also be jobs and housing growth in Airedale at Shipley, Bingley and Keighley.

A constraint faced by Bradford District is its relatively poor connectivity onto the regional and national road and rail networks, which is why significant investment in improved rail connectivity is seen as central to the City and the District realising its economic potential.

While Bradford already benefits from the electrified Airedale and Wharfedale rail lines, the electrification of the Calder Valley line would improve the city's connections to the core cities of Leeds and Manchester and to Manchester Airport. A possible Northern Powerhouse Rail hub at Bradford Interchange as well as a redeveloped Bradford Forster Square Station are highlighted as catalysts for economic growth. Buses will have an important role in supporting Bradford's growth and Bradford Council has expectations for improvements to the quality and frequency of bus services across the District and the wider City Region.

Alongside Leeds, Bradford has seen the delivery of the Cycle Superhighway (CS1) between the respective city centres. This route delivers a level of infrastructure quality not seen in the UK outside of London and in Bradford there is an expectation that this level of quality in design and implementation will be delivered for new sustainable infrastructure transport routes.

Calderdale

Calderdale is a centre for financial services and the location of the Lloyds Banking Group headquarters. It has a higher than UK average of employment in advanced engineering and manufacturing (AEM) specialising in complex components. The concentration of AEM means there is a well-developed supply chain and dense logistics sector dependent on the strategic and key road networks. Calderdale's priorities for growth lay in developing employment sites in the north and east of the District, including Halifax, Brighouse (Clifton Business Park) and the M62 Enterprise Zone; and the delivery of Calderdale Local Plan requirements for 17,000 new homes by 2031.

Improving transport connectivity within West Yorkshire, to Manchester is key to supporting Calderdale's existing economic activity and facilitating growth, but key road corridors are operating at capacity and journeys can be unreliable. Major congestion hotspots include Junction 25 of the M62, A629 Brighouse, Hipperholme Crossroads through to Stump Cross junction, A6026 and Copley Lane and Brighouse, Sowerby Bridge and Hebden Bridge town centres. Improvements in road capacity and operation will be delivered through the West Yorkshire Transport Fund, but road congestion is forecast to worsen significantly and major road building is made difficult by the district's geography, topography and heritage considerations. At the same time the quality of rail and bus alternatives are perceived as lacking.

The focus is on enhancing the quality of sustainable transport options to reduce car dependency and accommodate new trips. Rail is growing in importance for Calderdale residents, particularly for longer, cross-boundary journeys and a priority is to capitalise on planned HS2 and Northern Powerhouse Rail investment as well as upgrades to the strategic highway network.

The electrification of the Calder Valley line, capitalising on committed improvements, and road and rail improvements to the Bradford-Halifax-Huddersfield corridor are key strategic transport priorities. The bus will be important in serving communities not connected by rail and there is a desire to build on past investment in cycling. Improved quality of life and environment with good air quality, public realm and local accessibility are viewed as key to selling the attractiveness of Calderdale's places for attracting and retaining skilled workers and high-value businesses.





Kirklees

Kirklees has one of the biggest concentrations of manufacturing in the UK. The population is dispersed across the authority with lots of areas requiring access to the main employment centres of Huddersfield and Dewsbury. The Kirklees Local Plan expects to provide for 32,000 new jobs and 29,000 new homes between now and 2030, with Huddersfield and Dewsbury accommodating large parts of this growth.

Given the polycentric nature of West Yorkshire and Kirklees District's position amid the Leeds, Manchester and Sheffield City Regions, connectivity to the strategic transport networks are crucial. With its emphasis on manufacturing, Kirklees needs a transport network that enables people to travel and raw materials, products and people are moved around as flexibly and effectively as possible. Businesses in Kirklees are heavily reliant on the M62 for their access to the national road network and with 90,000 vehicles per day passing junction 24 at Ainley Top and delays a regular occurrence, the top road priority is for more capacity on the M62, above that currently programmed by Highways England. Highway schemes currently being developed in the West Yorkshire Transport Fund will address some of the main local congestion issues, but there will remain other hotspots to address on the A62, A616, A636 and A637. The designation of the North Kirklees Growth Zone means that future road infrastructure needs are starting to emerge - on a local level this focuses on a North Kirklees Orbital Route (M1 to M62 link) and Dewsbury town centre improvements, while a Huddersfield Outer Orbital road is a long held ambition.

Kirklees is seeking to make more efficient, effective use of public transport and cycling and walking. With Trans-Pennine electrification delivering rail journey time and capacity improvements, the other rail connectivity issues for Kirklees are the Penistone Line (Huddersfield to Sheffield) and north—south connections from Huddersfield to Halifax and Bradford, along with rail station improvements and more rail user car parking. A frequent, reliable, cost effective bus service is required with investment in ticketing improvements and hybrid/electric buses for air quality improvements. Investment in walking and cycling is targeted with emphasis on short local journeys, extension of the Greenway network and place-making and green streets to reduce car domination in commercial centres.







Leeds

Leeds' growth is important both to the economy of the city region and to the North's shared objective of rebalancing the economy. To improve productivity, investment in the city's transport infrastructure and assets, new and existing, is vital. Within Leeds itself, the focus is on creating connections to the key growth areas of an expanded city centre (South Bank area), an employment hub north of Leeds Bradford Airport, the Enterprise Zone and East Leeds. Leeds has an ambitious target of 70,000 new homes spread across the district.

The highway network will continue to play a central role in mobility, particularly for orbital journeys, but there are number of big challenges. The road and rail networks are constrained with congestion and crowding in the peak periods, there are significant air pollution and carbon emissions, and the road casualty record is not improving. Embracing new technology will help solve some of these issues, but there is also need for a debate about how road space is allocated for pedestrians, cyclists and public transport uses. There is an opportunity to think differently about the traffic flow around the city. This is especially the case in the city centre where it will be important to begin the process of developing a long term strategic approach and solution for the Inner Ring Road – this will be required during the 2020's ahead of decisions about the future of the tunnels.

Improved access to air travel and to the ports is needed to support global trading. Improved strategic road reliability, smart ticketing and a redeveloped Leeds station to incorporate HS2 and NPR will play their part in supporting Leeds' position at the heart of the North. At the local level, while the new rail franchises mark a step change, the need for further investment will remain. There is a place for enhanced station provision, including new stations, within the Leeds district. There is a need for better choices for those communities on corridors not served by heavy rail. The role and quality of an integrated and reliable bus services is likely to be paramount alongside a growing role for park and ride.

There are choices to be made for the longer term where the ultimate transport mode may vary according to the local circumstances and demand, but integration – of ticketing and brand along with seamless interchange – needs to be a common theme. Targeted investment in district centres and neighbourhoods remains essential, where there is a focus on creating places that people can enjoy and to support mobility and sustainable transport for all ages and needs. Leeds City Council is running a public conversation on transport in Leeds to test these priorities and ensure that the allocation of funding, be that the £173.5m from the cancelled NGT project or the continuation of the other funding such as the Transport Fund, is aligned to what a growing city needs.



Wakefield

Wakefield District includes the main population centres of Wakefield City, Ossett and Horbury in the north west, the Five Towns of Normanton, Castleford, Pontefract, Featherstone and Knottingley in the north east; and Hemsworth, South Elmsall, South Kirkby and Upton in the south east. Wakefield's location close to key transport corridors and the availability of land to accommodate housing and employment have put it in a strong position to grow.

Wakefield's priorities for growth include the SEP employment and housing priorities in Wakefield and Castleford. Wakefield Council's Local Plan sets out spatial priorities for growth mainly in Wakefield City and the Five Towns up to 2026. Future growth will be focused in areas where there is an opportunity to benefit from improved connectivity provided by new investment in rail and road infrastructure, including the Five Towns and south east of the district. Transport investment and future spatial development strategy will be aligned with the Council's Local Plan and Good Growth Plan. There will be an increased focus on delivering sustainable development and communities, with an improvement in quality of place, air quality, active travel and lifestyles, and health.

Wakefield has a large, well maintained road network serving many communities in the district and linking to key towns and cities in West and South Yorkshire. It will be important to maintain the condition of the network. There has been significant investment in new highway infrastructure in recent years with the Pontefract Northern Link Road and the Wakefield Eastern Relief Road improving connectivity, relieving congestion and opening up land for new development.



There is a continued need and desire to invest in the road and rail network during the next twenty years. Further investment in road infrastructure will be needed to support growth in the Five Towns and south east of the district, but there is a need to maximise connectivity through Northern Powerhouse Rail, East Coast Mainline and High Speed Rail. Improving connectivity to Leeds and Sheffield and beyond to other key employment centres is essential, including delivering transformational schemes such as Tram Train between Leeds and the Five Towns.



4. Our Spatial themes

Over the next 20 years, West Yorkshire and the Leeds City Region is going to benefit from substantial investment and some significant changes in how transport planning is organised and improvements delivered, which will transform our connectivity to regional national and global markets.

TRANSFORMED NATIONAL CONNECTIVITY

High Speed Rail provides the prospect of transformational change giving a major boost to our local economy.

The Government plans to invest £55.7 billion to build a new high speed rail network, High Speed 2 (HS2), from London to Birmingham, Leeds and Manchester. Direct high speed rail services will be operational by 2033, reducing journey times from London to Leeds by up to an hour, to only 83 minutes. This new line will provide a significant increase in capacity to meet the growing demand for rail travel.

As well as the direct improvements from HS2, the new high speed network will release constraints on the existing local and longer distance rail networks, creating opportunities for improving connections between the North's major cities and towns for commuters, business travel and potentially freight.

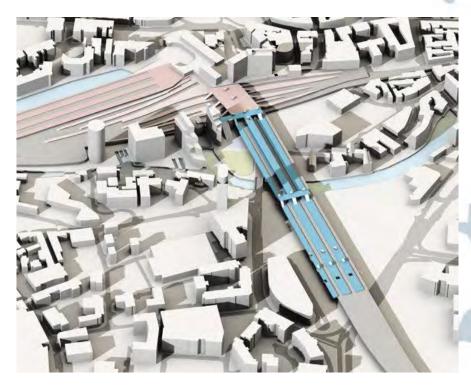
We are calling on the Government to accelerate delivery of HS2 and to future proof a connection to the existing High Speed 1 in the south for improved cross-channel links.

A new HS2 station – the Yorkshire Hub – will be located in the centre of Leeds, integrated with the existing Leeds City Station. We are working with the government, HS2 Ltd, the rail industry, Transport for the North and local partners to develop our proposals for the Yorkshire Hub now.

The upgrade of Leeds station will be a project of regional and national significance, providing a centrepiece of the region's transport network and a world-class passenger experience - bringing together onto a single integrated site HS2, Northern Powerhouse Rail (- previously called HS3) and other inter-city and urban rail services, alongside regional rail and other local public transport services as part of our proposals for a Leeds City Region 'metro' system.

Creating the Yorkshire Hub will not only strongly support the regeneration in the South Bank area of Leeds and the transformation of Leeds city centre, but the Yorkshire Hub will be an asset that benefits the whole of the city region.





Leeds Yorkshire Hub HS2 Station

- HS2 Station
- HS2 destination served by HS2 classic compatible services
- Core high speed network (Phases One and Two)
- HS2 connection to existing rail network
- Classic compatible services
- Existing lines with potential for future connection to HS2



TRANSFORMED CONNECTIVITY ACROSS THE NORTH

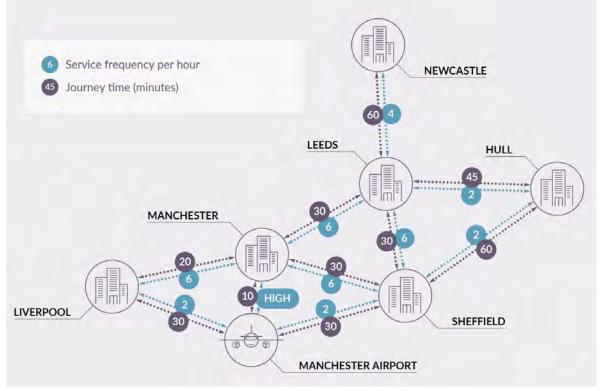
The West Yorkshire Combined Authority is working with a range of partners on a number of exciting opportunities to deliver much needed capacity, performance and quality improvements to the rail network connecting the major towns and cities of the north in the coming years.

Rail North was created in 2015 to bring together the Department for Transport and Transport Authorities across the North, including the West Yorkshire Combined Authority in a body to set the strategic objectives for delivering a world class railway for the North,

Rail North has already overseen the award of the new Northern and TransPennine franchises, which came into effect from April 2016 and will oversee a £1.2 billion investment in rail services across the north, including:

- 500 new-build carriages introduced across both franchises.
- All Pacer units withdrawn by the end of 2019 and all remaining rolling stock to be refurbished by 2020.
- 66% extra morning peak capacity on TransPennine Express into the main cities by 2019
- 37% extra morning peak capacity on Northern trains into the main cities by the end of 2019
- £30m invested in improving stations, including interactive ticket vending machines
- 45 currently unstaffed stations to be staffed for at least part of the day

Transport for the North (TfN) has been established by the Government as the new regional transport body for the North – comprising all the northern city regions, Local Enterprise Partnerships, Highways England, Network Rail and HS2 Ltd. In the March 2016 budget, funding was confirmed for TfN to develop options for Northern Powerhouse Rail (NPR) to provide a new high speed, high-quality, rail connection between the North's main urban centres, including Leeds to Manchester. We are working with TfN to influence the delivery of an intermediate NPR stop between Leeds and Manchester in West. Transport for the North is also developing proposals for accelerated improvements to the M62 motorway.



The Government is also expected to fund Network Rail in making upgrades to:

- The existing north Trans-Pennine rail line between Manchester, Leeds and York via Huddersfield - to be complete by the end of 2022, including the electrification of the line
- Calder Valley line with speed and frequency improvements and new trains expected to be in place by the end of 2019, with a new range of destinations available including Chester, Liverpool, Manchester Airport, Sheffield, Nottingham and Hull
- Harrogate Line with improvements including increased local service frequency and better connectivity to London expected by 2019





TRANSFORMED CONNECTIVITY ACROSS THE NORTH

On the roads, better performance and more capacity and is needed to serve the growing economy.

Smart Motorway technology is being introduced by Highways England to improve motorway journeys through maximising the use of the running lanes by adjusting speed limits and closing and opening lanes, including the hard shoulder – with the technology already introduced on sections of the M1 and M62 and more sections to follow by 2025

Through their Road Investment Strategy, Highways England has committed schemes to deliver infrastructure improvements to relieve congestion and increase motorway performance on the M1, M62 and M621 and at junctions such as Chain Bar and Lofthouse, with more to follow – and we are working with Highways England and Transport for the North to identify and assist delivery of the most needed improvements.

TRANSFORMED CONNECTIVITY IN THE LEEDS CITY REGION

Funding secured by the LEP and WYCA through the City Deal in 2015 has enabled the establishment of a £1.4 billion West Yorkshire plus Transport Fund (WY+TF), covering West Yorkshire and York. The Transport Fund is targeted at enabling key development areas and will help to create approximate ly 20,000 new jobs over the next 10 years.

A number of strategic transport projects will be delivered to facilitate growth identified in the SEP, which encompass:

- Improved motorway access
- Orbital road improvements
- Radial improvements on corridors for better public transport options into our urban centres
- Road and rail improvements between District hubs to provide capacity and better connectivity

More details of the West Yorkshire Transport Fund schemes that are programmes for early delivery are identified in the high level delivery programme in section 7 of this document, and further details can be accessed by visiting our website at www.westyorks-ca.gov.uk/wytf

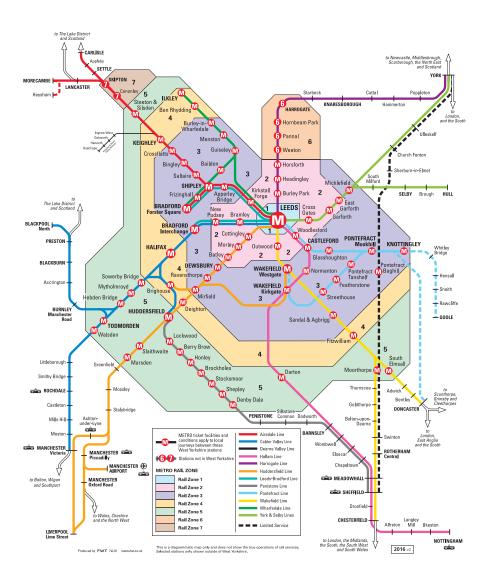
These Transport Fund improvements will work towards addressing the under-investment of the past and unlocking constraints on our networks – but gaps will remain and more investment will be needed.

We have an ambition to create a 'One System' integrated public transport network for West Yorkshire and the city region, which will build on and make the make the most of the national investment in High Speed Rail.

We already have an extensive heavy rail system serving much of the city region, and on many corridors improvements to rail will be the solution, but new technologies will be considered including the on-street running of Tram-Train, light Rail and Bus Rapid Transit where there are gaps in the rail network. A much improved bus network will also have a key role to play in supporting economic growth, and we propose to expand rail and bus Park and Ride facilities, building on the success of the Elland Road Park and Ride service in Leeds.

The cancellation of the NGT (trolley bus) project, together with the proposed allocation of the £173.5m funding from the Department for Transport, will require a fresh look at strategic gaps in our transport networks and the identification of potential transformational transport opportunities.

Leeds Bradford Airport has an important role as a gateway to the city region, and we have an aspiration to develop the role of the airport as a transport hub and to facilitate the development of the airport area as an employment growth zone. For this to happen, improved surface access needs to be delivered. A link road project is being taken forward by Leeds City Council and the long term public transport goal is to have a fixed rapid-transit link joining the airport with the centres of both Bradford and Leeds. For the short-to-medium term we are developing a proposal for a parkway-type station on the existing rail network to provide enhanced connections to the airport.



The existing West Yorkshire and City Region Rail Network